



# Kirsten Jones

Environmental Scientist

## Qualifications

MSc Environmental Science

BSc (Hons) Geography

BSc Zoology and Geography

Member, International Association for Impact Assessment, South Africa (IAIAsa)

Registered Professional Natural Scientist, South African Council for Natural Scientific Professions (SACNASP)

Member, International Association for Public Participation Southern Africa (IAP2 SA)

## Specialisation

Environmental Scientist

## Years in industry

12

Kirsten has twelve years of experience in environmental management, specialising in environmental impact assessments (EIA's), social impact assessments (SIA's), public participation and sustainability related projects. Her experience includes projects in South Africa, the United Kingdom, Namibia, Malawi and Nigeria. In addition to project coordination and management responsibilities, her technical responsibilities have involved the compilation and authoring of EIA chapters and environmental reports, such as legislative reviews, need and desirability, assessment of cumulative effects, land use assessments, review of legislative frameworks, evaluation of route/site options and alternatives assessment, social impact studies and public consultation strategies. Sectors include transport, energy (including renewable energy and power transmission), mining, waste, urban regeneration, wetland rehabilitation and natural resource management. In terms of sustainability, Kirsten has experience in sustainability appraisal within the UK context, as well as projects related to mainstreaming sustainability within the South African local municipal context.

Kirsten holds a Master of Science degree in Environmental Science from the University of KwaZulu-Natal. She is a registered Professional Natural Scientist (Environmental Science) with the South African Council for Natural Scientific Professions (SACNASP) as well as a member of the International Association for Impact Assessment South Africa (IAIAsa) and the International Association for Public Participation Southern Africa (IAP2 SA).

## Experience

### **Impofu Wind Farms, Eastern Cape Province, South Africa, Red Cap Impofu, 08/2017 - 07/2018, Senior Environmental Scientist**

Aurecon was appointed to undertake EIAs for three wind farms known as the Impofu Wind Farms, as well as a basic assessment report (BAR) for associated grid connection infrastructure to connect the wind farms to the grid. Responsibilities include technical lead for the screening process to establish the sensitivities on the wind farm site and therefore the most suitable areas for development. Co-author of the wind farm and grid screening report/s. Scoping Reports are currently in process.

### **Road materials supply strategy, Western Cape Province, South Africa, Western Cape Department of Transport and Public Works, 06/2008 - 02/2020, Environmental Specialist**

Aurecon was appointed to investigate possible material sources for use in maintenance and re-gravelling work on provincial roads in the Western Cape. The scope of work included the facilitation of compliance with the applicable environmental legislation, namely the Minerals and Petroleum Resources Development Act, No. 28 of 2002 (MPRDA), the National Heritage Resources Act, No. 25 of 1999 (NHRA), and the National Environmental Management Act, No. 107 of 1998 (NEMA). Responsibilities included managing a team to conduct over 30 basic assessment reports (BARs) as required under the National



Environmental Management Act (NEMA) (No 107 of 1998) as well as liaising with authorities and other specialists and coordinating the public participation process (PPP).

**The proposed upgrade of the Sam Nujoma West Road in Windhoek, Khomas Region, Namibia, City of Windhoek, 06/2014 - 10/2017, Environmental Specialist**

Upgrading of 5 km of Sam Nujoma Drive to dual carriageways through the centre of Windhoek, including traffic and economic studies, geometrical and structural designs, relocation of utilities, contract documentation and construction administration. Responsibilities included project management of the environmental approval process as well as the compilation of the scoping report and EMP as required under Namibia's Environmental Management Act (No 7 of 2007).

**Proposed gas to power (GtP) project in Saldanha Bay, Western Cape Province, South Africa, Atlantic Renewable Energy Partners (Pty) Ltd, 02/2016 - 06/2017, Environmental Specialist**

The project is a gas to power facility in Saldanha Bay. The project scope includes the onshore components, i.e. gas distribution, power generation, local transmission, substation transform and grid transmission. An upfront environmental screening exercise including an alternatives assessment to inform a future environmental impact assessment (EIA) process was required. Responsible as co-author of the environmental opportunities and constraints analysis to assist with the identification of suitable sites for the project.

**Environmental impact assessment (EIA) for the expansion of approved photovoltaic (PV) facilities near De Aar and Prieska, Northern Cape Province, South Africa, Mulilo Renewable Energy (Pty) Ltd, 03/2013 - 12/2016, Environmental and Social Specialist**

The project involved an environmental impact assessment (EIA) for the expansion of approved solar energy facilities located on the Hoekplaas and Klipgats Farms in Prieska and the Badenhorst Dam and Du Plessis Dam Farms in De Aar. The expansion of Hoekplaas Farm includes ten additional 75 MW photovoltaic (PV) facilities, while the expansion of Klipgats Pan Farm includes six additional PV units. The expansion of Badenhorst Dam Farm includes four additional 75 MW PV facilities, and that of the Du Plessis Dam Farm includes three additional PV units. Responsibilities include socio-economic impact assessments (SEIA's) as well as the summary and collation of the other specialist reports for the EIA's.

**Preparation of national integrated catchment management and rural infrastructure development guidelines, Malawi, Ministry of Agriculture, Irrigation and Water Development (MoAIWD), 01/2014 - 12/2016, Environmental Specialist**

The aim of this project is to address the interlinked challenges of poverty and a deteriorating natural resource base not only in the Shire Basin but in Malawi as a whole, to reduce the process of environmental degradation and improve the productive potential of natural resources. Responsible for assisting with compiling a consolidated network of catchment management guidelines that address best practice for land and natural resources management for the Malawi government. Involvement also included co-authoring the training material for village level implementation of the guidelines.

**Proposed wind energy facility (WEF) near Copperton, Northern Cape Province, South Africa, Copperton Wind Farm (Pty) Ltd, 09/2015 - 11/2016, Environmental Specialist**

The project comprises the environmental authorisation for a 140 MW wind energy facility (WEF) near Copperton in the Northern Cape. Aurecon was appointed to undertake the original environmental authorisation process and subsequent amendment applications. Responsible for managing the submission of an amendment for environmental authorisation which included corresponding with the Department of Environmental Affairs (DEA), managing specialist inputs, drafting of a report and managing the public participation process (PPP).



**Implementation capacity consultant for the Department of Transport and Public Works, Western Cape Province, South Africa, Western Cape Department of Transport and Public Works, 08/2013 - 09/2016, Environmental and Social Specialist**

Aurecon was appointed to provide implementation capacity consulting services to the works education facilities (WEF) directorate for the roll out of infrastructural projects for the period 2013 to 2016, which is a medium-term expenditure framework (MTEF) period. As part of this contract, Aurecon was appointed to investigate and propose measures to implement sustainability in schools, including best practice, good habits and critical interventions for sustainable school infrastructure initiatives. Responsible for the legislative framework review as well as the community integration component that dealt with involvement, partnership and mutual gains.

**Second bridge over the River Niger, Delta State, Nigeria, Nigeria Sovereign Investment Authority (NSIA), 08/2013 - 08/2016, Environmental Specialist**

The Federal Government of Nigeria proposed to construct a second bridge across the River Niger between Onitsha and Asaba and selected the Julius Berger-AIIM Consortium as the preferred bidder. Aurecon was appointed on behalf of AIIM to undertake an environmental and social impact assessment (ESIA) required in terms of the Environmental Decree No 86 of 1992, in accordance with the International Finance Corporation (IFC) guidelines, which included a resettlement action plan (RAP). The aim was to ensure regulatory compliance with the Nigerian environmental legislation and achieve the highest possible compliance with Equator Principles. Responsibilities include client liaison; coordination of the ESIA process, including 16 specialists; writing of the scoping and ESIA reports to meet Nigerian legislation and IFC standards and consultation with environmental authorities.

**Environmental impact assessment (EIA) for the fresh produce business hub in Wanaheda, Windhoek, Namibia, Namibia Development Corporation (NDC), 08/2013 - 08/2016, Environmental Specialist**

Aurecon was appointed to render consulting services for an environmental impact assessment (EIA) for the fresh produce business hub in Wanaheda. The aim was to identify the environmental sensitivities of the proposed development, to assess the potential impacts of development and related activities on the environment and to draft mitigation measures and an environmental management plan (EMP) based on the findings. The EIA also included a detailed traffic assessment of the area. Responsibilities included project management of the environmental approval process as well as the compilation of the scoping report and EMP as required under Namibia's Environmental Management Act (No 7 of 2007).

**Working for Wetlands Plan 2014 - 2017, Regional, South Africa, South African National Biodiversity Institute (SANBI) & Department of Environmental Affairs (DEA), 06/2013 - Date, Environmental Specialist**

Aurecon was appointed in 2010 for a three year cycle for the design, planning, environmental, project and risk management of the South African Government's Working for Wetlands Programme, which is a nationally run initiative by the South African National Biodiversity Institute (SANBI). The programme's objective is to rehabilitate damaged wetlands and to protect wetlands throughout South Africa, with an emphasis on complying with the with an emphasis on complying with the principles of the expanded public works programme (EPWP) through employing only local small, medium and micro enterprises (SMMEs). Responsible for drafting the basic assessment reports (BAR's) and rehabilitation plans for the North West Province and the rehabilitation plans for KwaZulu-Natal and review of the Mpumalanga and Northern Cape Provinces Reports, as well as providing assistance with the public participation process (PPP).



**Robben Island World Heritage Site (WHS): integrated conservation management plan (ICMP), Western Cape Province, South Africa, Robben Island Museum, 10/2012 - 11/2012, Environmental Specialist**

The project entailed the revision of the integrated conservation management plan (ICMP) for Robben Island. The scope of work included an environmental management plan (EMP), as a requirement of the World Heritage Convention Act (No 49 of 1999). Responsible for compiling the EMP. Work included a strength, weakness, opportunity and threat (SWOT) analysis of the natural environment, a review of the legislative framework, interviews with key stakeholders and the development of the EMP.

**Basic assessment for the proposed photovoltaic (PV) solar energy facility on a site south of Sutherland, Northern Cape Province, South Africa, iNca Energy, 06/2010 - 02/2012, Environmental Specialist and Project Coordinator**

The project involved the management of the environmental authorisation process for the proposed photovoltaic (PV) solar energy facility on a site south of Sutherland, in terms of the National Environmental Management Act (NEMA) environmental impact assessment (EIA) regulations (2010). Responsible for the project coordination of the public participation process (PPP) as well as compilation of the draft and final basic assessment reports. Also responsible for liaising with specialists and reviewing specialist studies.

**Mainstreaming environmental projects in integrated development plans (IDPs), Western Cape Province, South Africa, Table Mountain Fund (TMF), 06/2011 - 01/2012, Environmental Specialist**

The project entailed a partnership with the Table Mountain Fund (TMF) to mainstream environmental projects into municipal integrated development plans (IDPs) through 'green projects'. Responsible for facilitating and attending meetings and workshops with local government officials and developing a roadmap for the conceptualisation of appropriate 'green projects'.

**Environmental impact assessment (EIA) for the Kerrie Fontein and Darling Wind Farms, Western Cape Province, South Africa, Oelsner Group (Pty) Ltd, 05/2010 - 11/2011, Environmental Specialist, Social Specialist and Project Coordinator**

The project entailed management of the environmental authorisation process for the Kerrie Fontein and Darling Wind Farms, in terms of the National Environmental Management Act (NEMA) environmental impact assessment (EIA) regulations (2010). Responsible for project coordination of the public participation process (PPP) and the compilation of the scoping and EIA reports. Also responsible for liaising with specialists and reviewing of specialist studies. Also author of the social impact assessment (SIA) as a supporting specialist study.

**Environmental impact assessment (EIA) for the Touwsrivier Solar Energy Facility, Western Cape Province, South Africa, Soitec, 05/2010 - 08/2011, Environmental Specialist and Project Coordinator**

The project comprised the management of the environmental authorisation process for the Touwsrivier Solar Energy Facility, in terms of the National Environmental Management Act (NEMA) environmental impact assessment (EIA) regulations (2010). Responsible for project coordination of the public participation process (PPP) as well as compilation of the scoping and EIA reports. Also responsible for liaising with specialists and review of specialist studies.

**Environmental assessment for the Exeter Park and Ride facility at Alphington Junction, Devon, United Kingdom, Devon County Council (DCC), 06/2009 - 11/2009, Social Specialist**

The project entailed an environmental impact assessment (EIA) for the Exeter Park and Ride facility at Alphington Junction. This project is a component of the Exeter Principal Urban Area (PUA) project, which is included in the Devon Local Transport Plan (LTP) (2006 - 2011). Responsible for the assessment of effects on humans and settlements for inclusion in the environmental statement (ES).



**Environmental assessment for the M5 Junction 29 East of Exeter improvements, Devon, United Kingdom, Devon County Council (DCC), 06/2009 - 10/2009, Social Specialist**

The project entailed an environmental assessment for the improvements to M5 Junction 29 in support of the Exeter and East Devon Growth Point. They are required to improve capacity, safety and amenity to the road network as it continues to support both current and future predicted traffic loads and comprises a new link road to the new Exeter Science Park development. Responsible for the assessment of the pedestrian, cyclists, equestrian and community effects following the Highways Agency's Design Manual for Roads and Bridges (DMRB) guidance for inclusion in the environmental statement.

**Proposed energy-from-waste (EfW) facility and civic amenity recycling centre, Devon, United Kingdom, Devon County Council (DCC), 05/2009 - 10/2009, Social Specialist**

The energy-from-waste (EfW) facility in Barnstaple was proposed by Devon County to provide facilities to deal with residual waste once it has been sorted for reuse, recycling or composting. The project required an environmental impact assessment (EIA). Responsible for the assessment of the socio-economic and community impacts of the proposed EfW facility for inclusion in the environmental statement.

**Hurst to New Cross cable tunnels, London, United Kingdom, National Grid, UK, 07/2008 - 06/2009, Environmental Specialist and Project Coordinator**

The project involved the construction of a 400 kV cable tunnel from Hurst to New Cross, aligning with a number of head houses along the route. The project involved environmental screening of the route and the production of two environmental reports. Responsible for project coordination for the production of two environmental reports to assess the impact of a cable tunnel with associated shafts and head houses, from Hurst to Eltham and Eltham to New Cross. Responsibilities also included client liaison, budget control and preparation of budget variations. Technical tasks included the drafting of the introductory chapters of the scoping report and environmental reports, the non-technical summaries and input into the preferred route and site selection report as well as review of the other planning supporting documents.

**Covanta energy-from-waste (EfW) facility, Cheshire, United Kingdom, Covanta Energy Ltd, 09/2008 - 06/2009, Social Specialist**

The Covanta energy-from-waste (EfW) in Middlewich was proposed to use a mix of commercial and industrial wastes to provide combined heat and power to local homes and businesses. The project involved an environmental assessment. Responsible for assessment of the socio-economic and community impacts of the proposed EfW facility for inclusion in the environmental statement (ES). Also responsible for the preparation of an addendum to submit in support of the planning application in order to update the assessment in the context of the recession.

**Environmental impact assessment (EIA) for Exeter Science Park, Devon, United Kingdom, Devon County Council (DCC), 11/2008 - 04/2009, Environmental and Social Specialist**

The project entailed an environmental impact assessment (EIA) for the Exeter Science Park, which forms part of the Exeter and East Devon Growth Point. The project also involved the compilation of an environmental statement (ES). Responsible for the assessment of the land use impacts and the cumulative environmental effects of the project for inclusion in the ES. Also responsible for the compilation of the community impact assessment (CIA).

**Greenwich Waterfront Transit (GWT), London, United Kingdom, Transport for London (TfL), 10/2008 - 04/2009, Environmental and Social Specialist**

The Greenwich Waterfront Transit (GWT) is a proposed scheme along the south bank of the Thames between Greenwich town centre and Thamesmead, then on to Abbey Wood. The scheme proposes road realignment to allow for the priority of public transport. The project involved identification of route options and environmental assessment. Responsible for the production of the environmental appraisal of route options



report and environmental information for consultation report, as well as an assessment of the cumulative effects for inclusion in the environmental statement (ES). Also responsible for the compilation of the community impact assessment (CIA).

**Environmental impact assessment (EIA) for Walker Technology College, Newcastle upon Tyne, United Kingdom, Aura, 01/2009 - 04/2009, Social Specialist**

Aura proposed to develop two new school buildings and associated sports facilities within an area of open space known as Waverdale, which is located within the Walkergate ward of Newcastle. An environmental impact assessment (EIA) was required. Responsible for a socio-economic and community effects assessment for inclusion in the environmental statement.

**Sustainability assessment for Crawley Borough Council Housing, West Sussex, United Kingdom, Crawley Borough Council, 03/2009 - 04/2009, Environmental Specialist**

The project involved the assessment and scoring of the sustainability of the identified strategic sites on the urban fringe of Crawley town, which have the capacity to accommodate housing development options (including employment and community uses). Responsible for meeting with the planning consultants and collaborating with them to identify options and the assessment of the options in a matrix. Also responsible for authoring the sustainability appraisal report.

**Hereford Regeneration Project, Edgar Street Grid, Herefordshire, United Kingdom, ESG Herefordshire Ltd, 11/2008 - 02/2009, Social Specialist**

The Hereford Regeneration Project in the Edgar Street Grid comprised 43 ha of land north and adjacent to the city centre and is earmarked for development in phases. The project involved the environmental assessment for several of these phases. Responsible for the socio-economic baseline conditions reporting for the project, environmental scoping and assessment of the socio-economic and community impacts for inclusion in the environmental statement (ES) for the link road (Phase 1).

**Environmental evaluation for the East London Transit (ELT) scheme, London, United Kingdom, Transport for London (TfL), 10/2008 - 12/2008, Social Specialist**

The proposed East London Transit (ELT) scheme aimed to provide a high quality busway transit service between the areas of Ilford, Barking and Dagenham to the north of the River Thames, and was delivered in a number of phases. An environmental evaluation was required for Phase 1 of the scheme. Responsible as co-author of the socio-economic chapter of the environmental scoping report and the first stage of the socio-economic assessment as part of the scheme environmental evaluation.

**Scoping report for St Helier Town Park, States of Jersey, States of Jersey, 11/2008, Social Specialist**

The proposed town park in St Helier, States of Jersey required the scoping of environmental impacts as the first phase of an environmental impact assessment (EIA). Responsible for scoping of the socio-economic and community effects of the proposed park.

**Review of the social and environmental compliance for Ibom Power Plant and transmission line, Akwa Ibom State, Nigeria, Fortis Merchant Bank, 09/2007 - 04/2008, Social Specialist**

The project entailed a review, on behalf of the lenders, of the social and environmental compliance of the two environmental impact assessments (EIAs) for the independent power plant (IPP) at Ikot Abasi and associated transmission line, with the World Bank's environmental and social safeguard policies, the Equator Principles and the International Finance Corporation's (IFC's) requirements. Responsible for reviewing the social compliance of the facilities.



**Tewkesbury Borough Council sustainability appraisal, Gloucestershire, United Kingdom, Tewkesbury Borough Council, 03/2008 - 04/2008, Environmental Specialist**

The project comprised sustainability appraisal for Tewkesbury Borough as part of the preparation of its core strategy and development control policies development plan document. Responsible for drafting a scoping report.

**Planning application for the Olympic Energy Centres, London, United Kingdom, Olympic Delivery Authority (ODA), 03/2008, Social Specialist**

As a pre-requisite for development of infrastructure for the London 2012 Olympic Games, the Olympic Delivery Authority (ODA) required outline planning permission for Olympic, Paralympic and legacy transformation infrastructure. A planning application for the King's Yard Energy Centre is part of the approval of reserved matters that was required. Responsible for authoring the equalities statement for submission with the reserved matters planning application.

**Sustainability audit of the power contractors for Lower Lea Valley, London, United Kingdom, Olympic Delivery Authority (ODA), 06/2007 - 09/2007, Social Specialist**

The project comprised a sustainability audit of the operations of the power contractors commissioned by the Olympic Delivery Authority (ODA) to undertake tunnelling work to replace existing overhead power lines through the Lower Lea Valley. Responsible for auditing the social aspects of the contractors.

**New Cairo public-private partnership (PPP) potable water and wastewater treatment plants (W/WWTPs) project study, Cairo, Egypt, Economic Modernization Section, 07/2007, Social Specialist**

As part of the New Cairo public-private partnership (PPP) potable water and wastewater treatment plants (W/WWTPs) project study, a comparison report was required as part of a preliminary environmental and social impact assessment (PESIA). Responsible for interpreting and reporting on the social legislation and guidelines applicable in Egypt, by International Finance Corporation (IFC)/World Bank requirements and by the European Union (EU). A comparison report was produced.

**Widening of the M25 motorway, Section 4, London, United Kingdom, Highways Agency, 12/2006 - 06/2007, Environmental and Social Specialist**

The M25 is the 188 km orbital motorway encircling London. As part of a long term strategy to address congestion and growth, widening of the various sections was proposed. Section 4 included the motorway between Junction 27 and 30. An environmental statement (ES) and community strategy was required to support the proposals. Responsible for the input into the revision and implementation of the overarching communication plan for the M25 rapid widening scheme and the management and coordination of communication activities preceding the publication of the ES for Section 4. Also responsible for the production of a consultation report documenting the communication activities and assessment of cumulative effects for the ES.

**Environmental assessment for the Lamby Way in vessel composting facility, Cardiff, United Kingdom, Cardiff City Council, 03/2007, Social Specialist**

The project entailed an environmental assessment for the proposed in vessel composting facility at Lamby Way, which was a component of Cardiff's Capital Improvement Programme. Responsible for the socio-economic assessment for inclusion in the environmental statement (ES).

**Environmental assessment for the new waste transfer station in Lamby Way, Cardiff, United Kingdom, Cardiff City Council, 03/2007, Social Specialist**

The project entailed an environmental assessment for the new waste transfer station at Lamby Way, which formed a component of Cardiff's Capital Improvement Programme. Responsible for the socio-economic assessment for inclusion in the environmental statement (ES).



**Plymouth major scheme bid (MSB), Eastern Corridor extension, Plymouth, United Kingdom, Plymouth City Council, 04/2006 - 06/2006, Social Specialist**

The Plymouth City Council required the assessment of proposed Plymouth Eastern Corridor transport improvement options to address current and future transport capacity. An environmental statement (ES) was required based on the design manual for roads and bridges (DMRB) 'simple' assessment methodology. Responsible for the assessment of the effects on all travellers (such as pedestrian and cyclists) based on the DMRB guidance for inclusion in the ES.

**Plymouth major scheme bid (MSB), Langage Business Park link road, Plymouth, United Kingdom, Plymouth City Council, 04/2006 - 06/2006, Social Specialist**

The Plymouth City Council required the assessment of proposed options for access to Langage Business Park. An environmental statement (ES) was required based on the design manual for roads and bridges (DMRB) 'simple' assessment methodology. Responsible for the assessment of the effects on all travellers (such as pedestrian and cyclists) based on the DMRB guidance for inclusion in the ES.

**Social impact assessment (SIA) for the proposed Small Craft Harbour, Durban, KwaZulu-Natal Province, South Africa, Durban Point Development Company (Pty) Ltd, 01/2006 - 06/2006, Social Specialist**

The project involved the compilation of a social impact assessment (SIA) as a supporting study to the environmental impact assessment (EIA) for the proposed Small Craft Harbour at the Durban Point Waterfront Development area. Responsibilities included all aspects related to coordinating the SIA: input into the design of the methodology; the creation and maintenance of a stakeholder database; the coordination of public participation and stakeholder workshops; attendance of specialist consultants workshops, compilation of social profile; collection of field data; the analysis of data and report writing.

**Scoping report for the proposed Dube TradePort in Durban, KwaZulu-Natal Province, South Africa, Airports Company of South Africa (ACSA)/Dube TradePort Company, 06/2006, Social Specialist**

The proposed Dube TradePort, comprising the proposed King Shaka International Airport (KSIA) and associated trade zone, required a social impact assessment (SIA) as part of the environmental impact assessment (EIA). Responsibilities included assisting the EIA consultants with the creation of a social profile as a baseline for the social impacts of the airport and adjacent trade zones.





# Charles Norman

## Environmental Specialist

### Qualifications

MPhil: Environmental Law

BTech Forestry

NDip Forestry

Member, International Association for Impact Assessment South Africa (IAIASa)

### Specialisation

Environmental assessments

### Years in industry

30

Charles is a principal environmental practitioner with three decades' experience in environmental services. His technical proficiency and strategic thinking, along with his international environmental experience, place him in a strong position to advise environmental impact assessment (EIA) teams on the integration of technical pragmatism and due environmental processes. His extensive review experience has placed him in a key role mentoring environmental assessment practitioners within Aurecon and coordinating the advisory and delivery functions of projects.

He was the assistant project leader and technical coordinator for Vale's Moatize mine expansion and Nacala corridor EIAs in Mozambique and Malawi, where he managed a team of up to 80 practitioners, specialists and technical advisors.

He has worked extensively in rural Africa on a variety of environmental assessments and environmental planning assignments for a range of local and internationally funded public and private sector projects. His experience is predominantly related to mining, energy, large infrastructure and manufacturing projects in Southern and East Africa as well as Australia. He also provides advice to in-house engineering teams and oversees the appointment and management of external EIA consultants when required.

In addition, he has extensive experience in various aspects of environmental management, including soil and plant mapping, EIAs, environmental auditing and reviews. He spent a number of years with the Department of Environmental Affairs and Development Planning (DEA&DP), during which time he was responsible for reviewing and evaluating EIAs and appeals as well as advising the competent authority and the minister on law enforcement and environmental management matters.

Charles holds a Master of Philosophy degree in Environmental Law from the University of Cape Town in South Africa. He also obtained a Bachelor of Technology in Forestry from the Port Elizabeth Technikon (now Nelson Mandela Metropolitan University) in 1999.

## Experience

### **Closure and Rehabilitation of Kerosene Vale Ash Repository (KVAR) Stage 2 (New South Wales, Australia) 06/2018 – 07/2018. Phase leader.**

Aurecon was appointed by EnergyAustralia which owns and operates Kerosene Vale Ash Repository (KVAR) Stage 2 to undertake an Environmental Assessment to support an application under the former Section 75W of the Environmental Planning and Assessment Act 1979 (EP&A Act) to modify PA 07\_0005 to allow for the proposed closure and rehabilitation of KVAR Stage 2. This would occur as part of the rehabilitation of the wider Wallerawang Ash Repository. Responsible for the coordination of Noise and Vibration, Visual, Traffic and Air Quality desktop studies. Involved for 0.5 person-months. (EnergyAustralia).



**Lonsdale Sewer Augmentation Project. (Melbourne, Victoria, Australia) 07/2018 – 09/2018. Phase Leader.**

City West Water (CWW) engaged Aurecon to undertake a planning approvals assessment for Stage 2A of a four stage CBD sewer augmentation project (the Project). The Project includes the design and construction of a new outlet sewer along Lonsdale Street, between Spencer Street and Elizabeth Street. Responsible for the Environmental Risk Assessment. Involved for 0.25 person-months. (City West Water).

**Mossel Bay Upgrading of Informal Settlements Programme (UISP). (Western Cape Province, South Africa) 01/2017 – 07/2018. Phase Leader.**

The Mossel Bay Municipality appointed Aurecon to provide project management services for informal settlement upgrading in the Local Municipality via the UISP, as a follow on to the National Upgrading Support Programme (NUSP). Aurecon's scope of works included the project planning, procurement of requisite planning and environmental permissions and implementation oversight for 22 settlements. Responsible as phase leader for the Environmental Impact Assessment component, included managing specialist input and facilitating Environmental Authorisations. Involved for 1.5 person-months. (Mossel Bay Municipality).

**Aga Khan Hospital Kampala, Kampala, Uganda, Aga Khan University Hospital (AKUH), 09/2016 - 06/2020, Reviewer**

Aga Khan University Hospital (AKUH) intends to develop a 600-bed hospital on a 60 acre site at the junction of Jinja and New Port Bell Rd in Nakawa, Kampala. The initial phase of the project known as the "Launch Phase" will be developed on a 7 – 10 acre portion of the site and will consist of a 50-bed hospital with an estimated 14 300 m<sup>2</sup> gross building area. In terms of the scope of works, the launch phase will consist of acute bed units; intensive care units; high-dependency units; surgical suites; imaging suites; cardiac catheterization ("cath") laboratory; as well as labour and delivery suites. Aurecon will be providing full engineering services including geotechnical; civil; structural; wet services; fire safety and protection; mechanical; electrical; electronic (ICT, fire detection, audio visual and security) and acoustics; environmentally sustainable design (ESD) monitoring and management, provision of cost estimates and BOQs. Responsible for review of project reporting and liaison with sub-consultants.

**Environmental impact assessment for Penhill greenfields development project, Western Cape Province, South Africa, Provincial Government of the Western Cape (PGWC): Department of Human Settlements, 12/2016 - 06/2018, Project Leader**

The Department of Human Settlements is establishing a housing development to cater for approximately 8 000 units as part of the Southern Corridor initiative to upgrade informal settlements within the City of Cape Town. Aurecon was appointed to undertake an environmental impact assessment (EIA) for this greenfields housing development. Responsible as project leader.

**Design of Mizingani seawall and promenade, Phase IIA, Zanzibar City, Zanzibar, Tanzania Ministry of Finance, 12/2013 - 05/2018, Environmental Control Officer (ECO)**

The Revolutionary Government of Zanzibar (RGoZ), through its Zanzibar Urban Services Project (ZUSP), appointed Aurecon to lead a consortium of six consultancy companies for the design of the 340 m-long vertical seawall, with a 5 m-wide sea reclamation, along Mizingani Road. Based on design work completed under the Aga Khan Trust for Culture's (AKTC's) technical support, Aurecon's scope of work included detailed design of the seawall and promenade; the preparation of construction drawings, specifications, contract packages and tender documents; building condition assessment and review of the environmental and social management plan (ESMP). Responsible for auditing the site to ensure adequate implementation of environmental controls.



**Upgrading of DR1609 and portion of DR01625, Western Cape Province, South Africa, Provincial Government of the Western Cape (PGWC): Department of Transport and Public Works, 12/2005 - 12/2017, Environmental Specialist**

Aurecon was appointed to undertake design and authorisation services for the upgrading of the DR1609 and a portion of DR01625 in Rondevlei, Western Cape, which is adjacent to the Garden Route National Park and crosses within a Ramsar protected wetland. The scope of works included the preparation of an environmental impact assessment (EIA). Responsible as project leader for the EIA component, including leading the compilation of the EIA and coordinating specialist inputs.

**Mossel Bay NUSP participatory based planning support, Western Cape Province, South Africa, Department of Human Settlement (DHS), 08/2015 - 11/2017, Environmental Specialist**

The National Department of Human Settlements appointed Aurecon to provide participatory based planning support for informal settlement upgrading in Mossel Bay Local Municipality via the National Upgrading Support Programme (NUSP). Aurecon's scope of works included the production of an assignment implementation plan, upgrading plans and sustainable livelihoods programmes for 18 settlements, community capacity building programme, and a skills transfer report. Responsible as project leader for the screening of environmental constraints and preparation of applicability checklists for the competent environmental authority.

**Upgrading of Plettenberg Bay Airport, Western Cape Province, South Africa, Bitou Local Municipality, 09/2016 - 06/2017, Environmental Specialist**

Bitou Municipality intends to upgrade the Plettenberg Bay Airport in the Western Cape Province, including adding additional infrastructure and hangars to comply with Civil Aviation Authority (CAA) regulations. Responsible for compilation of an environmental constraints analysis.

**Proposed hydropower station and associated infrastructure at Riemvasmaak, Northern Cape Province, South Africa, Riemvasmaak Hydro Electric Power (Pty) Ltd, 02/2012 - 06/2017, Technical Advisor**

Aurecon was appointed to provide the lead consultancy services for the environmental impact assessment (EIA) for the proposed 25 MW hydropower station at Riemvasmaak on the Orange River, adjacent to the Augrabies National Park. Responsible for providing advice on legal procedure and technical project aspects.

**Perdekraal East Wind Farm environmental and social due diligence (ESDD), Western Cape Province, South Africa, African Infrastructure Investment Managers (AIIM), 11/2016 - 04/2017, Project Leader**

In order to consider providing funding for the development of the Perdekraal East Wind Farm, the client required the undertaking of an environmental and social due diligence (ESDD) study, including an environmental and social action plan (ESAP), to ensure that environmental authorisations in place were compliant with the requirements of the IFC. Responsible for the compilation of the ESDD and ESAP and coordination of specialist inputs.

**Curepipe Point wind farm assessment, Mauritius, Southern Energy Holdings, 05/2016 - 06/2016, Environmental Specialist**

Aurecon was appointed to undertake a fatal flaw review of a 29 MW wind energy development near the town of Curepipe in Mauritius. Responsible for the review of an environmental impact assessment (EIA) study as well as the identification and evaluation of environmental risks.

**Environmental and social impact assessment (ESIA) for the Makambako Wind Farm, Njombe Region, Tanzania, Windlab Limited, 11/2015 - 03/2017, Project Leader**

Windlab Tanzania SPV 1 Limited (Windlab) want to construct a wind farm and associated infrastructure, including a transmission line (project referred to as the Miombo Hewani Wind Farm) with a generation capacity of between 100 MW and 300 MW north of Makambako in the Njombe Region, Tanzania. Aurecon



was appointed to undertake the requisite environmental process on behalf of Windlab as required in terms of the Environmental Management Act (Act 20 of 2004) (EMA). Responsible for leading the team of specialists and sub-consultants to develop an IFC compliant ESIA.

**Working for Wetlands Plan 2014 - 2017, National, South Africa, South African National Biodiversity Institute (SANBI), 06/2013 - 09/2016, Environmental Advisor**

Aurecon was appointed in 2010 for a three year cycle for the design, planning, environmental, project and risk management of the South African Government's Working for Wetlands Programme, which is a nationally run initiative by the South African National Biodiversity Institute (SANBI). The programme's objective is to rehabilitate damaged wetlands and to protect wetlands throughout South Africa, with an emphasis on complying with the principles of the expanded public works programme (EPWP) through employing only local small, medium and micro enterprises (SMMEs). Responsible for a review and giving advice on legal process requirements.

**Environmental impact assessment (EIA) for the Mtwara super base, Mtwara Region, Tanzania, Schlumberger Seaco Inc, 01/2015 - 06/2016, Project Leader**

Schlumberger wished to construct a super base within the Export Processing Zone (EPZ) in Mtwara to serve all land and offshore operations in the region. Aurecon was appointed to undertake the environmental impact assessment (EIA). Responsible for client liaison and coordination of sub-consultants as well as review.

**Kinangop Wind Farm Phase 1A status review and risk assessment, Nakuru, Kenya, Kinangop Wind Park, 11/2015 - 03/2016, Environmental Specialist**

Following termination of the engineering, procurement and construction (EPC) contract, Aurecon was appointed to assess the project status and risks associated with remobilising the Kinangop Wind Farm project. Responsible for environmental review.

**Pre-feasibility study for Rukwa coal-to-power project, Mbeya, Tanzania, Rukwa Development Company, 11/2014 - 09/2015, Team Member**

Aurecon was engaged by Kibo Mining to carry out a pre-feasibility study for a coal-fired power station to be located adjacent to an opencast coal mine in the Rukwa region of Tanzania. The study included preliminary environmental assessments of the power station and the mine, power evacuation assessment, power station design and modelling of various configurations, reporting and technical input to the project financial model. Responsible for contributing to the drafting of an environmental and social prefeasibility study.

**Project information memoranda (PIM) for Mtwara Port and the Mtwara/Mikindani municipal master plan, Mtwara Region, Tanzania, Development Bank of Southern Africa (DBSA), 08/2014 - 09/2015, Environmental Process Advisor**

The project entailed the development of project information memoranda (PIM) for Mtwara Port, which entailed a review of the Mtwara Port feasibility study of 2012 and other related material that would assist in the preparation of a bankable PIM. The project also involved the development of the Mtwara/Mikindani detailed municipal land use master plan to collect baseline spatial data that can assist in understanding the growth projections for the city and proposing suitable physical and social infrastructure and land uses to accommodate the growth. Responsible for liaising with the authority, coordination of sub-consultants and review.

**Environmental impact assessment (EIA) for the construction of the AfriSam cement factory, Western Cape Province, South Africa, AfriSam South Africa (Pty) Ltd, 02/2011 - 09/2015, Project Leader**

AfriSam was looking to enter the Western Cape market, and consequently decided to fund the construction of a cement factory and associated infrastructure. Aurecon was appointed to undertake an environmental impact assessment (EIA) process for the cement plant, mine and associated infrastructure located on Farm 1139 in the Saldanha industrial area. Services involved undertaking and managing the EIA process, traffic



impact study (TIS), surface water investigation and social impact assessment (SIA). Responsible for project management, client and authority liaison, coordination of technical information and specialists inputs, management of public processes, EIA and compilation of an environmental management plan (EMP) report.

**Environmental screening of a potential wind energy site, Tanzania, Windlab Limited, 02/2015 - 04/2015, Project Leader/Technical Coordinator**

Aurecon was appointed to determine the feasibility of establishing a wind energy facility (WEF) in Tanzania. As part of evaluation Aurecon was appointed to undertake a comparative environmental constraints analysis, including the biophysical, social and heritage aspects of the identified sites. Responsible for the identification and assessment of environmental constraints.

**Western Cape road materials supply strategy, Western Cape Province, South Africa, Provincial Government of the Western Cape (PGWC): Department of Transport and Public Works (DTPW), 06/2008 - 03/2015, Principal Environmental Practitioner**

Increasing pressures from tightened environmental legislation have resulted in lengthy waiting periods (about 18 months) for identifying required material sources. The wait is also caused by investigation phases, getting approval from the Mineral Resources and Petroleum Development Act (DMR), the Department of Environmental Affairs and Development Planning (DEADP), the National Environmental Management Act (NEMA) and the Land Use Planning Ordinance (LUPO). Aurecon was responsible for prospecting suitable road making materials, sampling, testing, and identifying technically suitable sources to be used for both identified projects and as strategic pits, as well as for getting all the required approvals. Responsible for planning of authorisation processes and review of submissions. Also responsible for liaison with authorities and partner consultants.

**Upgrading of Distillery Road in Wellington, Western Cape Province, South Africa, Drakenstein Local Municipality, 10/2013 - 02/2015, Project Manager**

The project entailed a basic environmental impact assessment (EIA) for the proposed upgrading of Distillery Road in Wellington, including a heritage assessment. Responsible for project management, client and authority liaison, coordination of specialist input and review of final reports.

**George mobility strategy for the improvement of public transport, Western Cape Province, South Africa, Provincial Government of the Western Cape (PGWC): Department of Transport and Public Works (DTPW), 09/2003 - 02/2015, Consulting Team Member**

This broad based mobility strategy project, which is centred on the improvement of public transport in the George municipal area, is one of many national interventions to upgrade public transport in South Africa. The objective is the transformation of the existing bus and minibus taxi industry into a single entity contracted to the local authority to provide scheduled, subsidised public transport services. Work has included detailed operational design and costing; contract development as well as planning for the upgrading of road and other infrastructure, including a bus stop, a temporary bus depot, and an inter-urban bus station. The project has also comprised a considerable amount of engagement with the local bus and minibus industry representatives as well as broad based public consultation. Responsible for the advisory role on environmental constraints for implementation of public transport initiative.

**Feasibility study for the Knysna-Bitou water supply scheme, Western Cape Province, South Africa, Eden District Municipality, 01/2013 - 12/2014, Project Member**

The project involved the identification of the water resource and bulk water requirements of the local municipalities of Knysna and Bitou for the next 20 years and exploring the technical and economic viability of integrating the bulk water supply systems serving the towns of Knysna and Plettenberg Bay. Responsible for the identification and evaluation of environmental constraints for the screening of options exercise.



**Environmental constraints analysis of potential wind energy sites near Aberdeen, Eastern Cape Province, South Africa, Juwi Renewable Energies (Pty) Ltd, 06/2013 - 08/2014, Project Leader/Technical Coordinator**

The client wished to determine the feasibility of establishing a wind energy facility at Aberdeen in the Eastern Cape. As part of evaluation Aurecon was appointed to undertake a comparative environmental constraints analysis, including the biophysical, social and heritage aspects of the identified sites. Responsible for contributing to identification and assessment of environmental constraints. Also responsible for constraints identification and evaluation as well as a review.

**Water augmentation study for the Bitou Local Municipality, Western Cape Province, South Africa, Bitou Local Municipality, 10/2009 - 03/2014, Environmental Scientist**

The Wadrif 1E Dam scheme was for the augmentation of the bulk water supply to the Plettenberg Bay area. Aurecon's project scope focused on the Wadrif 1E off-channel dam and included a basic assessment process for an emergency pipeline and the remainder of the pipeline in terms of the relevant environmental legislation. An application for a licence to store was made in terms of the National Water Act, 1997 (NWA) and a forestry permit application for a drilling site investigation for the Wadrif 1E Dam site and for dam construction. Responsible for the management of specialist environmental impact assessment (EIA) consultant and review of all reports.

**Independent review of environmental impact assessment (EIA) applications, Western Cape Province, South Africa, Department of Environmental Affairs and Development Planning (DEA&DP), 03/2011 - 12/2013, Task Leader**

The purpose of the project was to review contentious environmental impact assessment (EIA) applications in terms of the National Environmental Management Act 107 of 1998 (NEMA) to support authority decision making. Responsible for project management, client liaison, advisory role to team members and review and coordination of final products.

**Pilot catchment management plan: Kyoga water management zone, Kampala, Uganda, The World Bank, 12/2012 - 12/2013, Co-author of report**

Aurecon was appointed to prepare a pilot catchment management plan (CMP) for the Awoja Catchment. Major social and environmental issues within the catchment area were identified early in the process as critical informants to catchment management planning so these can be integrated into the planning process at an early stage. The rapid strategic environmental assessment (RSEA) focussed on identifying the issues and conditions in the catchment related to water and natural resources that are likely to be a major influence and that might represent important risks, as linked to potential water resource development options. Responsible for contributing to the coordination of and reporting on implementation options.

**Update to rapid strategic environmental assessment (RSEA): development of a pilot catchment management plan (CMP), Kampala and Mbale, Uganda, Ministry of Water and Environment (Uganda), 12/2012 - 11/2013, Project Member**

This water management and development project (WMDP) for Uganda comprised the development of a pilot catchment management plan (CMP) in the Kyoga water management zone (WMZ). The CMP outlines the changes required and the benefits of these changes towards ensuring sustainable development and the equitable distribution of the resulting benefits. The integrated water resources management-based (IWRM-based) CMP provides an integrated strategy for the sustainable water resource management in the pilot Kyoga WMZ catchment. Responsible for the coordination of and reporting on implementation options.



**Operational environmental management plan (EMP) for Shoprite Checkers, Western Cape Province, South Africa, Shoprite Checkers, 04/2010 - 07/2013, Task Leader**

The project included the compilation of an operational environmental management plan (EMP) to meet the local municipality's requirements for the new shopping centre at Sandown Road in Cape Town. Responsible for project management, client and authority liaison and the compilation of EMP report.

**Environmental impact assessment (EIA) for the Riemvasmaak Hydropower Station, Northern Cape Province, South Africa, Mulilo Renewable Energy (Pty) Ltd (MRE), 12/2011 - 06/2013, Technical Advisor**

Aurecon was appointed to submit a proposal to undertake an environmental impact assessment (EIA) for the construction of a hydropower station on the Riemvasmaak Farm north of Augrabies Falls National Park. Services provided included legislation and policy review, strategic review, public consultation, EIA coordination and facilitation and various specialist disciplines. Responsible for providing advice on the legal procedure and technical project aspects.

**Exploratory drilling environmental management plan (EMP), Tete Province, Mozambique, Coal India Africana Limitada (CIAL), 02/2012 - 04/2013, Project Leader**

The project entailed the compilation of an environmental management plan (EMP) for exploratory drilling operations for coal prospecting in Moatize. Responsible for client liaison, project management, coordination of team members and review of final products.

**Environmental management plans (EMPs) for coal bed methane prospecting activities, Tete Province, Mozambique, Rio Tinto Coal Mozambique (RTCM), 07/2012 - 02/2013, Project Member**

Aurecon was appointed by Rio Tinto to compile the environmental management plan (EMP) for the coal bed methane (CBM) prospecting activities in each of the lease areas, ensuring the necessary licensing of the activities. Responsible for project management, coordination of information and team inputs.

**Social and environmental impact assessment (SEIA) for the Rössing Uranium Mine expansion project, Erongo Region, Namibia, Rössing Uranium Mine, 09/2009 - 08/2012, Project Member**

Rössing Uranium wanted to obtain environmental authorisations for the expansion of the mine to increase production and extend the life of the mine. Aurecon undertook a social and environmental impact assessment (SEIA) to determine the environmental impacts brought about by the proposed activities, proposed measures to minimise detrimental impacts or enhance positive impacts and presented the findings to the Namibian authorities. The SEIA included two primary product deliverables, namely the environmental scoping report (ESR) and the subsequent SEIA report. Responsible for providing support to the team appointed to facilitate the required environmental authorisations for the expansion of the Rössing Uranium Mine, including the review of legislative requirements and specialist reports.

**Bankable feasibility study (BFS) for a Zuma Energy project, Kogi State, Nigeria, Zuma Energy Nigeria Limited, 10/2011 - 01/2012, Project Leader**

Zuma Energy Nigeria Ltd was planning to construct and operate a 1 200 MW coal-fired power station along the Niger River. Aurecon prepared a bankable feasibility study (BFS) using a gap analysis of all existing documents and work already done by Zuma Energy. The study included a review of the environmental and social issues by conducting an environmental and social impact assessment (ESIA) to determine adequacy and compliance to the Nigerian Statutory requirements and the World Bank's standard Equator Principles (EPs) and to a level suitable for financial closure. Responsible for the review of final report against World Bank standards and EPs.



**Independent review of environmental impact assessment (EIA) for report, KwaZulu-Natal Province, South Africa, Knight Piésold, 11/2011 - 12/2011, Consulting Team Member**

The purpose of the project was to review the environmental impact assessment (EIA) process undertaken by Knight Piésold for a bulk water supply pipeline in KwaZulu-Natal. Responsible for the review of impact assessment methodology.

**Pre-feasibility study on the Great Lakes Railway, Burundi, Rwanda, Tanzania, Uganda and Zambia, Common Market for Eastern and Southern Africa (COMESA), 03/2010 - 12/2011, Consulting Team Member**

The project entailed a pre-feasibility study to improve port, inland waterway and rail inter-connectivity in the Great Lakes Region (Lake Kivu, Lake Edward, Lake Tanganyika, Lake Victoria and Lake Albert) based on several transportation constraints experienced. The primary objective was reduced transportation costs for the provision of rail links to connect existing rail networks with each other, and the development of the inland water transport services across lakes within the region. The work included a pre-feasibility study that consisted of resource mapping, traffic forecasts, alignment surveys, engineering cost estimates, an environmental impact assessment (EIA), institutional review, financing mechanisms review and economic evaluation and feasibility study. Responsible for authority consultation, site inspection and review of proposed rail alignments and reporting on environmental constraints.

**Application for an atmospheric emissions licence (AEL) in Albertinia, Western Cape Province, South Africa, South Cape Poles, 03/2007 - 11/2011, Task Leader**

The project entailed facilitating an application for an atmospheric emissions licence (AEL) in terms of the National Environment Management (NEM): Air Quality Act (No 39 of 2004) for the operation of a creosote treatment facility in Albertinia. Responsible for project management, client and authority liaison, coordination of specialist inputs and final report compilation.

**Environmental impact assessment (EIA) for the Moatize Coal Mine expansion, Tete Province, Mozambique, Vale Moçambique Limitada, 03/2010 - 09/2011, Assistant Project Leader**

The aim of the project was to expand operations at Moatize Coal Mine due to the favourable global market for coal. Aurecon was appointed to undertake separate environmental impact assessments (EIAs) for each of the proposed components of the project. The particular work plan addressed EIA Package 1, which was for the proposed expansion of the mine at Moatize and related infrastructure. Responsible for client and specialist liaison, coordination of technical information and review of final reporting.

**Environmental impact assessment (EIA) for the Nacala Rail Corridor, Malawi and Mozambique, Vale Moçambique Limitada, 03/2010 - 09/2011, Project Member**

The project entailed the completion of four environmental impact assessments (EIAs) for the upgrading of existing and the construction of new railway sections along the Nacala Corridor from the Moatize Coal Mine in Mozambique, through Malawi, to the Port of Nacala, and a new coal handling terminal. This particular work plan addressed Packages 2 to 5, which were for the components of the Nacala Logistics Corridor. Responsible for client and specialist liaison, coordination of technical information and review of final reporting.

**Decommissioning of the Sonae Novobord board manufacturing plant in George, Western Cape Province, South Africa, Sonae Novobord, 07/2009 - 07/2011, Project Leader/Manager**

Aurecon was appointed to prepare an environmental management plan (EMP) for the decommissioning of Sonae Novobord's board manufacturing and veneering plant in George. Responsible for project management, client and authority liaison and review of the final EMP report.





**Upgrading of Merweville wastewater treatment works (WWTW), Western Cape Province, South Africa, Beaufort West Local Municipality, 02/2007 - 06/2011, Project Manager**

The project entailed the facilitation of the required environmental authorisation and waste licence for the upgrading of the wastewater treatment works (WWTW) in Merweville. Responsible for project management, review of final reports.

**Emergency desalination plant for Mossel Bay, Western Cape Province, South Africa, Mossel Bay Local Municipality, 05/2010 - 01/2011, Environmental Assessment Practitioner**

The Mossel Bay Local Municipality appointed Aurecon to undertake an environmental impact assessment (EIA), which is required by Act 107 of 1998 of the National Environmental Management Act (NEMA), to assess the potential impacts related to the construction and operation of a 15Ml/day emergency desalination plant in the Voorbaai area. Aurecon was responsible for consultation with the authorities throughout the EIA to confirm that all potential issues were identified; for the compilation of a report that provided a detailed description of the potential impacts associated with the development, and the findings; an evaluation of the potential impacts; and recommendations regarding mitigation and the way forward. Responsible for project management, review of EIA and environmental management plan (EMP) reports.

**Environmental impact assessment (EIA) for infrastructure upgrades at the Etosha National Park, Oshikoto Region, Namibia, Millennium Challenge Account (MCA), 04/2010 - 11/2010, Consulting Team Member**

The project entailed the completion of two environmental impact assessments (EIAs), including environmental management plans (EMPs), for the construction of staff housing and management centres at the Ombika and Galton gates as well as the Okaukuejo and Otjovasandu villages in the Etosha National Park. The aim was to improve the quality of infrastructure to attract senior management to the park to ensure that the park retains its status as a premier tourist destination. Responsible for the review of specialist reports and final reporting.

**Pre-feasibility (FEL 2) social and environmental screening of rail corridor alternatives through Malawi, Southern Region, Malawi, Vale Moçambique Limitada, 09/2009 - 09/2010, Principal Environmental Practitioner**

The project involved a pre-feasibility (FEL 2) level investigation into alternative routes for the proposed railway alignment section between Moatize in Mozambique and the Nkaya Junction in Malawi. Aurecon prepared the social and environmental screening report, which provided a background to the methodology for environmental (social and biophysical) screening. A high-level impact study and comparative assessment of alternative alignments were undertaken to determine the most environmentally responsible and sustainable options. Responsible for gathering field data and contribution to the screening report.

**Independent review of environmental impact assessment (EIA) applications for the Department of Economic Development, Environment and Tourism, Eastern Cape Province, South Africa, Department of Economic Development, Environmental Affairs and Tourism, 02/2007 - 07/2010, Project Manager**

The project entailed the review of environmental impact assessment (EIA) applications to assist with the processing of backlog applications in terms of the Environment Conservation Act (Act 73 of 1989) (Cacadu Region). Responsible for project management, liaison with authorities and applicants, advising authorities on fatal flaws and policy conflicts, drafting environmental authorisations and training authority staff.

**Relocation of the Sedgfield water treatment works (WTW) and associated infrastructure, Western Cape Province, South Africa, Knysna Local Municipality, 12/2004 - 06/2010, Project Manager**

The purpose of the project was to undertake an environmental impact assessment (EIA) to facilitate the relocation of the Sedgfield water treatment works (WTW) out of a floodplain. Responsible for managing the



basic assessment reporting procedure for the relocation. Also responsible for project management, client liaison and the identification and assessment of impacts.

**Independent review of environmental impact assessment (EIA) applications for the Department of Environmental Affairs and Development Planning (DEA&DP), Western Cape Province, South Africa, Department of Environmental Affairs and Development Planning (DEA&DP), 04/2009 - 05/2010, Project Leader**

The project entailed the review of environmental impact assessment (EIA) applications and appeals to assist the competent authority with the processing of backlog applications in terms of the Environment Conservation Act (Act 73 of 1989) and the National Environmental Management Act 107 of 1998 (NEMA). Responsible for project management, client liaison, staff advisory and review of all final submissions.

**Decommissioning of creosote treatment facility at Tergniet, Western Cape Province, South Africa, Outeniqua Pale (Pty) Ltd, 06/2007 - 04/2010, Project Manager**

Aurecon was appointed to facilitate the relocation of Outeniqua Pale's timber treatment works, including a waste licence for the decommissioning of a site contaminated with hazardous waste and the drafting of an environmental and health impact assessment (EHIA) on instruction from the Environmental Management Inspectorate (EMI). Responsible for project management, client and authority liaison, advising legal representatives, managing public process and the compilation of the final EHIA and environmental management plan (EMP) reports.

**Environmental management plan (EMP) for Garden Route Casino, Western Cape Province, South Africa, Garden Route Casino (Pty) Ltd, 12/2008 - 04/2010, Project Leader**

Aurecon was appointed to update the environmental management plan (EMP) to accommodate various proposed upgrades to the casino and associated facilities. Responsible for project management, client and authority liaison and review of the final report.

**Upgrading of creosote treatment facility at Albertinia, Western Cape Province, South Africa, Outeniqua Pale (Pty) Ltd, 05/2008 - 02/2010, Project Leader**

The purpose of the project was to facilitate the upgrading of an unlicensed timber treatment works, including the formulation of environmental management plans (EMPs), at Albertinia, Western Cape. Responsible for project management, client and authority liaison, coordination of specialist input, impact assessment and, advising the client's legal representatives.

**Upgrading of the Outeniqua effluent pump station and pipeline, Western Cape Province, South Africa, George Local Municipality, 09/2009 - 08/2010, Project Member**

The growth of the residential sectors in George necessitated the upgrading of the existing regional wastewater treatment works (WWTW). Aurecon was appointed for the design, tender compilation and contract supervision for the upgrading of the plant from a capacity of 9.3 MI/day to 15 MI/day. The upgrade included the addition of more aerators to the bioreactor, a dissolved air flotation (DAF) unit and a sludge digester. Responsible for managing an application for amendment to an existing authorisation and facilitating the public process.

**Upgrading of Hartenbos wastewater treatment works (WWTW), Western Cape Province, South Africa, Mossel Bay Local Municipality, 04/2009 - 07/2009, Project Leader**

Aurecon was appointed to facilitate the requisite environmental process for the upgrading of the wastewater treatment works (WWTW) in Hartenbos. Responsible for project management, client and authority liaison and review of the final reports.



**Environmental processes for the Beaufort West wastewater reclamation plant, Western Cape Province, South Africa, Water & Wastewater Engineering, 10/2008 - 07/2009, Project Manager**

The purpose of the project was to facilitate the requisite environmental processes for the implementation of a wastewater reclamation plant for Beaufort West Municipality, inclusive of a waste licence and environmental authorisation. Responsible for project management, client and authority liaison, management of specialists and public processes and the compilation of final reports.

**Alien vegetation eradication and rehabilitation, Fancourt Estate, George, Western Cape Province, South Africa, Fancourt Golf and Country Estate, 2008, Project Manager**

The project entailed the formulation of an alien vegetation eradication and rehabilitation plan for the Fancourt landholding on the Malgas River. Responsible for project management, client liaison and report compilation.

**Review of the biodiversity components of municipal spatial development frameworks (SDFs) in the C.A.P.E. domain, Western Cape Province, South Africa, South African National Biodiversity Institute (SANBI), 2008, Consulting Team Member**

The aim of the project was to provide an overview of the requirements for biodiversity in spatial development frameworks (SDFs), and an assessment of the current status of biodiversity in these SDFs. Responsible for the review of SDFs and final reports.

**Additional units at the open cycle gas turbine (OCGT) plant in Mossel Bay, Western Cape Province, South Africa, Eskom, 01/2005 - 01/2006, Consulting Team Member**

The project entailed the management of a comprehensive and multi-disciplinary environmental impact assessment (EIA) process for three additional gas turbine units at the peaking generation power plant in Mossel Bay. Responsible for project management assistance, liaison with specialists and report review.

**Review of environmental impact assessment (EIA) applications and appeals, South Africa, Provincial Department of Environmental Affairs and Development Planning (DEA&DP), 2004 - 2006, Principal Environmental Officer**

The project entailed reviewing environmental impact assessment (EIA) applications and appeals and drafting environmental authorisations. Responsible for reviewing EIA applications, advisory role to competent authority and the drafting of environmental authorisations.

**Assessment of plantation plans, George, Western Cape Province, South Africa, Woodfield Farm, 2004, Consultant**

The project entailed the evaluation of Woodfield Farm's existing management plans and making recommendations for optimising forestry operations.

**Proprietor of Southern Cape environmental services, Western Cape Province, South Africa, 1992 - 2004, Consultant**

The project entailed the compilation of a number of environmental management plans (EMPs) and environmental assessments and evaluations for a variety of developments in the Southern Cape. This included the mapping of soils of various Southern Cape forestry plantations and indigenous forests for the Council for Scientific and Industrial Research (CSIR), South African Forestry Company Ltd (SAFCOL), the Department of Water and Sanitation (DWS) and private companies, for productivity and planning purposes as well as the sampling of river water for analysis by Stellenbosch University: Department of Soil Science. Responsible for financial management, project management, report compilation and client liaison.

**Plantation environmental auditing, Western Cape Province, South Africa, NCT Forestry Co-operative Limited (NCT), 2003, Consultant**

The project entailed the auditing of Van Reenen plantations for compliance with Forestry Stewardship Council (FSC) requirements. Responsible for environmental auditing.



**Invasive vegetation mapping, Western Cape Province, South Africa, EnviroGIS, 2001 - 2003, Consulting Team Member**

Appointed to map and quantify invasive vegetation status in the Barrydale, Botvlei, Kamanassi and Karatara catchments.

**Western Cape forestry land use study, Western Cape Province, South Africa, Department of Water and Sanitation (DWS), 2001, Project Manager**

Appointed and commissioned by Department of International Development (DFID) as project leader and co-author to conduct a study on the Western Cape land forestry land use.

**Mapping of soils for forest planning, Western Cape Province, South Africa, Department of Water and Sanitation (DWS), 1988 - 1992, Consulting Team Member**

As part of a function while employed at the Council for Scientific and Industrial Research (CSIR), mapped extensive soil bodies within the Southern Cape catchments for productivity evaluation and species choice. Responsible for mapping soil bodies.



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA


### DETAILS OF EAP AND DECLARATION OF INTEREST

File Reference Number:	(For official use only)
NEAS Reference Number:	12/12/20/
Date Received:	DEA/EIA/

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014

### PROJECT TITLE

**Proposed Impofu East Wind Farm and Associated Infrastructure, near Oyster Bay, Eastern Cape:  
Environmental Impact Assessment Report**

Environmental Assessment Practitioner (EAP): <sup>1</sup>	Aurecon South Africa (Pty) Ltd		
Contact person:	Mrs Kirsten Jones		
Postal address:	PO Box 494, Cape Town		
Postal code:	8000	Cell:	-
Telephone:	021 526 6991	Fax:	-
E-mail:	Kirsten.jones@aurecongroup.com		
Professional affiliation(s) (if any)	Mrs Jones is a Professional Natural Scientist registered with the South African Council for Natural Scientific Professions (SACNASP), a member of the South African affiliate of the International Association for Impact Assessment (IAIASa) as well as a member of the International Association for Public Participation (IAP2).		

Project Consultant:	As above		
Contact person:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

4.2 The Environmental Assessment Practitioner

I, **Kirsten Jones**, declare that –

General declaration:

- I act as the independent environmental practitioner in this application;
- 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 declare that there are no circumstances that may compromise my objectivity in performing such work;
- 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 take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- 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;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not all the particulars furnished by me in this form are true and correct; will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F 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 Environmental Impact Assessment Regulations, 2014;



Signature of the environmental assessment practitioner:

**Aurecon South Africa (Pty) Ltd**

Name of company:

**9 April 2019**

Date: