

Biotechnology & Environmental Specialist Consultancy cc

Environmental & Business Solutions



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BESC

Biotechnology & Environmental Specialist Consultancy cc

Leaders in Industrial Ecology, Environmental Site Assessments & Environmental Management Systems

Company Background

BESC is a world-class professional practice, which was established in 1995 to fulfill the growing demand by industry and corporate business for professional expertise in Safety, Health & Environmental Management. We are widely recognized as leaders in Industrial Ecology, Environmental Site Assessments & Safety, Health & Environmental Management Systems. We are committed to providing industry and the corporate business sector with expertise in Safety, Health & Environmental Management within the framework of modern business principles, in order to overcome the challenges of 21st century. Although our work area is primarily based in Southern Africa, we have/are working with companies in Central and Western Africa and Eastern Europe.

Services

Safety, Health & Environmental Management & Sustainability

Environmental Management Systems (ISO 14001) - BESC has consulted to several large international companies and assisted them in the design and implementation of Environmental Management Systems based on the requirements of ISO 14001. We have the expertise and track record for developing tailor-made Environmental Management Systems based on three dimensional risk assessment modules, that not only improve environmental performance but that create a basis for corporate reporting and triple bottom line functionality.

Safety & Health Management Systems (OHSAS 18001 and ILO 2000) - BESC has consulted to several large international companies and assisted them in the design and implementation of Safety & Health Management Systems based on the requirements of OHSAS 18001. We have the expertise and track record for developing tailor-made Safety & Health Management Systems based on three dimensional risk assessment modules.

Safety, Health & Environmental Auditing - BESC has a proven track record in conducting high level SHE audits to a greater degree of detail than a certification audit. Our competency in the industrial sectors covers almost all European Accreditation Scopes.

Environmental Due Diligence Auditing - BESC has the capacity and experience in undertaken comprehensive Environmental Due Diligence Audits, and where necessary these can be extended to include the full Due Diligence Assessment (Financial through to Technical).

Safety, Health & Environmental Performance Evaluation - In order to ascertain the level of Safety, Health & Environmental performance, we are able to evaluate to level of performance against any recognised standard.

Corporate Safety, Health & Environmental Reporting - BESC can produce high quality Corporate Reports using the latest GRI Guideline companies of any size and complexity.

Corporate, Safety, Health & Environmental Policy & Strategy - BESC has the capacity for assisting companies in developing Safety, Health & Environmental Policies and developing short, medium and long term strategies to take the company into the 21 century.



Environmental Assessment

Environmental Site Assessment - BESC undertake Environmental Site Assessments for industrial real estate in accordance with the standard procedures prescribed by the American Society for Testing & Materials and the US Environmental Protection Agency. Only accredited and internationally accepted laboratories are used for environmental sample analysis.

Environmental Impact Assessment - BESC has undertaken in excess of 260 Environmental Impact Assessments in accordance with published legislation. Topics of assessment range from telecommunication networks, electrification networks, water supply and roads, resort development, and industrial application such as sewage works, ammonia refrigeration plants, chlorine gas facilities, bulk fuel depots and mining.

Strategic Impact Assessment - The Strategic Impact Assessment process can be used to assess a proposed policy, plan or programme that has already been developed; or it can be used to develop, evaluate and modify a policy, plan or programme during its formulation.

Public Participation - Usually forming part of the Environmental Impact Assessment process, BESC can facilitate Public Participation in order to ascertain the particular needs or concerns of Interested & Affected Parties.

Construction & Engineering Management Plans - The implementation of Safety, Health and/or Environment Management Programmes into the construction and engineering sector requires a special understanding of practical application and targets. BESC has prepared many programmes to support effective Safety, Health and/or Environment Management in the construction and engineering sector

Environmental Management Programme Reports - BESC has prepared Management Programme Reports for mines, quarries, borrow pits.

Environmental Management Plans - BESC has prepared and directed Environmental Management Plans for the implementation and management of requirements specified in Records of Decisions authorising activities listed undertake the Environmental Impact Assessment regulations.

Pollution Assessment

Desk-top and feasibility studies - BESC can prepare desk-top studies of actual or potential environmental pollution events that are likely to occur in any particular industrial sector. Risk to key environmental receptor is also assessed.

Environmental Risk Assessment - BESC has developed an in-house 3-dimensional risk assessment methodology, which we utilise in determining event risk to the environment. We also utilise other US EPA approved methodologies for other risk assessment specific needs.

Environmental Site Pollution - BESC has undertaken many geohydrological based site assessment and risk assessment of industrial pollution by hydrocarbons, heavy metals and other contaminants.

Remediation, reclamation and regeneration strategies - BESC advises on best method for clean-up or rehabilitation of sites which have been polluted.

Other Specialist Services

Greenhouse Gas Assessment - BESC has capacity and expertise for assessment of greenhouse gas emission from any industrial sector.

Marine & Estuarine Ecology - BESC has a niche skill for undertaking environmental impact assessment and developing management plans for the marine, coastal and estuarine environments

Expert Witness for Environmental Litigation - BESC have the competency and recognised professionalism to serve as expert witness in industrial environmental cases.



Project Management

We have extensive project management experience, and are able to lead and manage projects from conception through to completion. All our projects are run on project management schedules.

Safety, Health & Environmental Management

Our proven record of accomplishment includes the following:

- BESC are appointed as Safety, Health & Environmental Consultants to **Ursus Breweries** (A division of **SAB Miller Plc**), at four breweries in Romania.
- BESC are appointed as Safety, Health & Environmental Consultants to **Plzeňský Prazdroj, a.s.** (A division of **SAB Miller Plc**), at three breweries in the Czech Republic.
- BESC are appointed as Safety, Health & Environmental Consultants to **Coca-Cola Company** (Southern Africa).
- BESC are appointed as Safety, Health & Environmental Consultants to **Coca-Cola Fortune** (South Africa).
- BESC are appointed as Environmental & Quality Management Systems Consultants to **BHP Billiton's MOZAL Aluminium Smelter** in Maputo, Mozambique.
- BESC are the exclusive Safety, Health & Environmental Consultants to **Mopani Copper Mines Plc (Zambia)**, responsible for the establishment and implementation of the integrated Safety, Health & Environmental Management Systems
- BESC were appointed as Environmental Management Consultants to **Lonmin Metallurgical Services (Lonmin Plc, United Kingdom)** at their Smelter and Base Metal Refinery Complex and Precious Metal Refinery for the design and implementation of the ISO 14001 Environmental Management System
- BESC has undertaken extensive Environmental Site Assessments/Pollution Assessment (ESA I & II) for a large number of South African industries (details confidential).
- BESC has undertaken in excess of 300 Environmental Impact Assessments (EIA) in terms of the EIA Regulations published under the Environment Conservation Act and/or the National Environmental Management Act. Recent/Current key EIA projects include:
 - **ABSA Dev Co / Bigen Africa** - Albany regional Water Services Scheme
 - **ABSA Dev Co / Bigen Africa** - Port Alfred Waste Water Treatment Works
 - **ABSA Dev Co / Bigen Africa** - Thornhill Housing Project
 - **Edcot Trust/Kempston Leisure** - Homeleigh Motor City
 - **International Finance Corporation** - Kalakundi Copper & Cobalt Mine, Democratic Republic of Congo
 - **Island View Storage** - Bulk Fuel Storage Facilities (Richards Bay, Durban, Cape Town)
 - **Sugar Creek Trading** - Rockclyffe Shopping Mall
 - **Thynk Property Partners** - Gonubie Lifestyle Mall
 - **True Group Building** - King Williams Town/Zwelitcha Mall & Office Park

BESC are appointed as the Environmental Management Consultants for three new golf estate in East London.

- **African Dune Investments** - Mount Coke Golfing Estate
- **Altivex 103 (Pty) Ltd** - Kidds Beach Golfing Estate
- **Southern Palace Investments** - Rockclyffe Golfing Estate

Professional Associations

- South African Council for Natural Scientific Professions (Professional Environmental Scientist)
- South African Institute of Ecologists & Environmental Scientists (Professional Environmental Scientist)
- International Association of Impact Assessors
- Royal Society of South Africa
- South African Association of Botanists
- Phycology Society of South Africa

Contact Information

Dr Malcolm Logie

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Company Structure & Equity

Company structure and equity are described in the table below:

Function	Gender	Equity Status	Ownership
Management	Male x 1	Male x 1	100%
Professional Services	Male x 3 Female x 1	PDI x 1 Female x1	
Administration	Female x 3	PDI x 1 Female x 3	

Professional Indemnity Insurance

BESC has world wide Professional Indemnity Insurance (excluding USA and Canada) with Glen Rand MIB to a limit of ZAR 1 000 000.00. The insurance covers all our consulting services.

Organisational Capacity

BESC was established in 1995 and the company is different from other safety, health & environmental consultancies in that its services are aimed primarily at corporate industry and the industrial sector.

All reports and documentation are managed in the *Microsoft Office 2003 Professional Suite™*.

McAfee Internet Suite 2007™ and *MDaemon Security Plus™* protect all reports and computers systems, and is kept up-to-date on a daily basis.

In order to ensure security of information contained in reports, all reports issued from our good office are compiled in *Adobe Acrobat 7.0 Professional™* as secured and digitally certified PDF documents.

BESC is an authorised distributor of *Adobe Reader™*.

Dr. Malcolme Logie
Principal and Managing Director
MSc (Botany); PhD (Biotechnology), Rhodes

Malcolme Logie has over 12 years experience in the field of Environmental Management with extensive experience in the fields of Industrial Environmental Management; Safety, Health & Environmental Management Systems; and Environmental Auditing and Assessments (environmental site assessments, environmental impact assessments, systems certification), in South Africa, Mocambique, Namibia, Angola, Ghana, Zambia, Egypt, The Czech Republic, The Slovak Republic and Romania.

Malcolme has wide-ranging experience primarily in the following sectors:

- Automotive sector
- Beverages
- Chemicals & chemical products
- Civil and mechanical engineering
- Electricity & water supply
- Metals refining & processing
- Mining & quarrying
- Pulp & paper
- Telecommunications

Malcolme's project experience largely falls into the following broad areas:

Safety, Health & Environmental Management Systems

Malcolme's experience includes management system design and implementation and also certification audits across a wide range of industrial and mining sectors in South Africa, Mocambique, Angola, Zambia and Romania.

Environmental Site Assessments

Malcolme has been the project leader on many Phase I and II ESA's that have been undertaken in accordance with the ASTM standards, at several industrial facilities in South Africa.

Environmental Auditing

Malcolme's auditing experience includes ISO 14001, OHSAS 18001 and ISO 9001 certification level audits; legal compliance, and environmental performance audits across a wide range of industrial and mining sectors in South Africa, Mocambique, Namibia, Angola, Ghana, Zambia, Egypt, The Czech Republic and Romania.

Environmental Impact Assessments

Malcolme has managed a broad range of environmental impact assessments ranging from: industrial facilities, telecommunication networks, electrification networks, transportation infrastructure, waste sites and water supply.

Professional Affiliations & Registrations

- Registered as a Professional Natural Scientist (Environmental Scientist) with the South African Council of Natural Scientific Professions (SACNASP).
- Professional Member of the South African Institute of Ecologists and Environmental Scientists
- International Association of Impact Assessors
- Royal Society of South Africa
- South African Association of Botanists
- Phycology Society of South Africa
- South African Auditor & Training Certification Association (SAATCA) – EMS Verification Auditor
- Bureau Veritas Quality International – Lead EMS Auditor

South African Council of Natural Scientific Professions

- Malcolme is a member of the Education Committee of South African Council of Natural Scientific Professions (SACNASP) for the registration of Professional Natural Scientist.

Rhodes University Investec Schools of Business

- Malcolme sits on the Advisory Board for the Rhodes University Investec Schools of Business which provides advice and directs the strategic planning and continual development of the business school.

Fields of Competence

- Safety, Health & Environmental Management Systems
- Industrial Environmental Management
- Environmental Site Assessments
- Environmental Impact Assessments

Education

- PhD (Biotechnology) 1995
- MSc (Botany), 1992
- BSc Honours (Botany), 1990
- BSc (Plant Science & Biochemistry), 1989

Key Projects

Recent key projects include:

South African Breweries Millers (SAB Miller)

- Ursus Breweries, Romania (SAB Miller), where Malcolme is responsible for the development and implementation of a Safety, Health & Environmental Management System at four breweries and a depot.
- Plzeňský Prazdroj, Czech Republic (SAB Miller), where Malcolme is responsible for the development and implementation of an integrated Safety, Health & Environmental Management System at three breweries.
- Ibhayi Brewery (Port Elizabeth) where an Environmental Management System was designed and implemented at this new state-of-art brewery. During the construction of the brewery Malcolme reviewed all the plans to ensure environmental sustainability

BHP Billiton (MOZAL), Mocambique

- Malcolme designed and co-ordinated the implementation of the Environmental Management System at this BHP Billiton aluminium smelter in Maputo, and continues to service this organization environmental management needs.

Coca-Cola Company

- Malcolme is the appointed SHE Management System Consultant to Coca-Cola Company Southern Africa, responsible for advising of the implementation of a SHE MS compliant with ISO 14001:2004, OHSAS 18001:1999 and the Coca-Cola Worldwide E3 programme.
- Malcolme is guiding to process for the development and implementation of an integrated SHE Management System at Coca-Cola Fortune (Polokwane & Bloemfontein). The management system is based on the requirements of ISO 14001:2004 and OHSAS 18001:1999.

Lonmin Platinum, South Africa

- Malcolme co-ordinated the design and implementation of the Environmental and Quality Management System at Lonmin's Western Platinum Refinery in Johannesburg, and also revised and re-establish the EMS at this platinum producers smelter and base metal refinery near Rustenburg.

Dorbyl Automotive Technologies, South Africa.

- For the past eight years Malcolme has been the exclusive environmental management and environmental management systems consultant to this automotive components producer. The production facilities include: foundries, forges, machine shops and manufacturing units.

Telkom SA Ltd, South Africa.

- Malcolme was instrumental in establishing the internal environmental assessment guidelines for this national telecommunication service provider, for the placement of telecommunication masts and associated infrastructure. He has also undertaken more than 120 environmental impact assessments of individual telecommunication masts throughout South Africa.

Environmental Site Assessments

- Malcolme has been the project leader on many Phase I and II ESA's that have been undertaken in accordance with the ASTM standards, at several industrial facilities in South Africa.

SHEQ Management Systems Auditing

- Malcolme has in excess of 7000 hours of SHEQ Management Systems auditing. He has audited companies in South Africa, Mocambique, Namibia, Angola, Ghana, Zambia, Egypt, The Czech Republic, The Slovak Republic and Romania.

European Scope of Accreditation

Malcolme has competency in the following Industrial Sectors:

1	Agriculture, forestry, fisheries	20	Ship building
2	Mining & quarrying	21	Aerospace
3	Beverages & foodstuff industries	22	Other transport equipment (automotive, rail)
4	Textile industries	23	Manufacturing (not classified elsewhere)
5	Leather & leather products	24	Recycling
6	Wood industries	25	Electricity supply
7	Pulp, paper & paper products	26	Gas supply
10	Mineral-oil processing	27	Water supply
12	Chemicals & chemical products	28	Construction
13	Pharmaceuticals	30	Hotels & restaurants
14	Rubber & plastic goods	31	Transport & communication
15	Glass, ceramics, processing of minerals & ores	34	Research & development
16	Production of cement, lime, gypsum & concrete, lime and gypsum products	35	Business services
17	Metals refining & processing, & production of metals	37	Education
18	Mechanical engineering	39	Other social services

Ms. Lee-Anne Proudfoot
Senior Environmental Consultant
MSc (Marine Biology), Rhodes

Lee-Anne Proudfoot has experience in the fields of Marine and Coastal Ecology, Environmental Impact Assessments and Environmental Site Assessments.

Education

- M.Sc. (Marine Biology), Rhodes, 2006
- B.Sc. Honours (Marine Biology), Rhodes, 2003
- B.Sc. (Zoology and Ichthyology), Rhodes, 2002

Lee-Anne's project experience includes:

Environmental Impact Assessments

Lee-Anne assisted in and managed a broad range of scoping & environmental impact assessments ranging from: agri-industrial & industrial facilities, residential & resort developments, informal settlement planning & formalisations, storm water management, water supply, desalination and sewage.

Environmental Site Assessments

Lee-Anne has experience in site assessments, field sampling & monitoring, permit applications and in the compilation of reports for prospective land buyers.

Environmental Management Plans

Lee-Anne has experience in compiling and monitoring the Environmental Management Plans for a wide range of developments.

Environmental Auditing

Lee-Anne has experience in auditing the environmental compliance of and compiling environmental auditing reports for waste disposal sites.

Geographical Information Systems (GIS)

Lee-Anne has experience in using ArcView, Idrisi and Manifold software in assessing & producing maps, site plans, aerial photographs, etc.

Key Projects

African Dune Investments (Pty) Ltd

Conroy is currently managing the impact assessment for the proposed Mount Coke Golf Estate.

ABSA Development Company/Bigen Africa

Lee-Anne is the project manager for the environmental management component of the Albany Regional Water Services Project

International Finance Corporation

Lee-Anne is the co-ordinator and reviewer of the specialist environmental studies required for the environmental impact assessment for the proposed Kalakundi Copper & Cobalt Mine in the Democratic republic of Congo.

Carpano Investments (Pty) Ltd

Lee-Anne is responsible for the environmental management component of the Spatial Development Framework for the proposed Rockclyffe development area south-east of East London

African Dune Investments (Pty) Ltd

Lee-Anne is the EIA and Project Manager for the proposed Mt Coke Road Golfing and Residential Estate.

Kempston Leisure (Pty) Ltd

Lee-Anne is the EIA and Project Manager the environmental impact assessment for a proposed motor city

Edcot Trust (Pty) Ltd

Lee-Anne is the EIA and Project Manager the environmental impact assessment for a proposed motor city

Wild Coast Fishing Co-operative

Lee-Anne is the EIA and Project Manager for the environmental impact assessment for a proposed fish processing plant

Alvitex 103 (Pty) Ltd

Lee-Anne assisted on the environmental impact assessment for the proposed resort development.

Rakel (Pty) Ltd

Lee-Anne managed the environmental impact assessment for desalination plants servicing the proposed resort developments

Alvitex 103 (Pty) Ltd

Lee-Anne managed the environmental impact assessment for desalination plants servicing the proposed resort developments

Leisure Homes for Senior Citizens

Lee-Anne managed the environmental impact assessment for the proposed extension of a retirement village

Fire Ring

Lee-Anne was involved in the compilation of a site assessment report for the prospective purchasing of land

Blue Beacon Investments (Pty) Ltd

Lee-Anne managed the environmental impact assessment for a Connemara Housing Complex

Mr. Conroy van der Riet
Environmental Consultant
BSc Honours (Environmental Geography), NMMU

Conroy van der Riet has experience in the fields of Marine and Terrestrial Ecology, Geography, Geographical Information Systems (GIS), Environmental Impact Assessments, Environmental Site Assessments, Environmental Management Plans and Environmental Auditing.

Education

- BSc Hons (Environmental Geography), 2006
- BSc (Zoology and Geography), 2005

Conroy's project experience includes:

Environmental Impact Assessments

Conroy assisted in and managed a broad range of scoping & environmental impact assessments ranging from: agri-industrial & industrial facilities, residential & resort developments, informal settlement planning & formalisations, storm water management, water supply, desalination and sewage.

Environmental Site Assessments

Conroy has experience in site assessments, field sampling & monitoring, permit applications and in the compilation of reports for prospective land buyers.

Environmental Management Plans

Conroy has experience in compiling and monitoring the Environmental Management Plans for a wide range of developments.

Environmental Auditing

Conroy has experience in auditing the environmental compliance of and compiling environmental auditing reports for waste disposal sites.

Geographical Information Systems (GIS)

Conroy has experience in using ArcView, Idrisi and Manifold software in assessing & producing maps, site plans, aerial photographs, etc.

Key Projects

Alvitex 103 (Pty) Ltd

Conroy is currently managing the impact assessment for the proposed Kidds Beach Golf Estate and other adjacent development.

Silicon Smelters (Pty) Ltd (FerroAtlantica)

Conroy assisted and managed the environmental impact assessment for the proposed environmental authorization of charcoal burners in the East Cape, West Cape, Free State, North-West, Limpopo and Gauteng Provinces.

Buffalo City Municipality – Planning and Economic Development

Conroy managed the environmental authorization for various settlement planning & formalization projects in the Amathole district.

Bunker Hills Investments (Pty) Ltd

Conroy managed the environmental management plan for the proposed residential development

Rakel (Pty) Ltd

Conroy assisted in managing the environmental authorization for the proposed residential development and assisted in the environmental impact assessment for the desalination plants servicing the proposed residential development

Rapitrade (Pty) Ltd

Conroy assisted in managing the environmental management plan for the proposed residential development and managed the applications to the South African Heritage Resources Agency (SAHRA) and the Department of Water Affairs & Forestry.

Golden Falls (Pty) Ltd

Conroy assisted in the environmental authorization and the environmental management plan for the proposed residential development

Beautiful Connections (Pty) Ltd

Conroy managed the environmental authorization for a proposed wildlife resort in the Queenstown area and the proposed development of Eco-Type chalets in the East London area.

Wild Coast Fishing Co-operative

Conroy assisted in the environmental authorization for the proposed fish works factory.

African Dune Investments

Conroy assisted in the environmental authorization for the proposed golf estate development.

East London Golf Course

Conroy managed the environmental authorization for the proposed realignment of the 6th fairway & minor upgrades in order to upgrade the East London Golf Club (ELGC).

The Diocese of Grahamstown

Conroy managed the environmental authorization for the proposed rezoning and residential development of the St Lukes Mission Land.

Buffalo City Municipality – Waste Management

Conroy assisted in the environmental audit process on the Buffalo City Regional Waste Disposal Site, focussing on issues such as construction, operations and air-quality monitoring.

Bigen Africa (Pty) Ltd & Ndlambe Local Municipality

Conroy managed the environmental authorization process for the proposed Port Alfred Waste Water Treatment Works upgrade project.

Mr. Nishal Sewruttan
Environmental Consultant
BSc - Environmental Management (Chemistry), UNISA

Nishal Sewruttan has experience in the fields of Environmental Impact Assessments, Environmental Site Assessments, and SHE Management Systems

Education

- BSc Environmental Management (Chemistry), 2005

Nishal's project experience includes:

Environmental Impact Assessments

Nishal has managed a broad range of environmental impact assessments ranging from industrial facilities to residential developments.

Environmental Site Assessments

Nishal has managed and assisted in environmental site assessments for existing industrial sites as well as proposed residential sites.

Safety, Health, and Environmental Management Systems

Nishal's experience includes SHE management system design and implementation, legal compliance audits, and risk assessments.

Key Projects:**Southern Palace Investments**

Currently managing the Scoping and Environmental Impact Assessment for the development of The Rockclyffe Golf Estate. And other adjacent developments

Thornhill Integrated Housing Development, Port Alfred – ABSA DEVCO

Currently managing the Scoping and Environmental Impact Assessment Process for the integrated housing development.

Natures Rest cc

Currently managing the Basic Assessment process for the proposed rezoning and development of Farm 1245/1&4, Lagoon Valley, East London.

Sugar Creek Trading 34 (Pty) Ltd

Currently managing the Basic Assessment Process for the development of a shopping mall and commercial offices.

Cape Town Bulk Storage

Currently managing the Scoping and Environmental Impact Assessment Process for the expansion of the bulk liquid storage facility.

Farm 809, Gonubie

Assisted in preparing a Phase I and II Environmental Site Assessment for the proposed development site.

Island View Storage Ltd, Durban

Managed the Phase I and II Environmental Site Assessment for the bulk liquid storage facility.

Mopani Copper Mines, Zambia

Responsible for advising the implementation of a Safety, Health & Environmental Management System.

Coca-Cola Fortune, Polokwane

Assisted in preparing an Environmental Legal Compliance audit.

Coca-Cola Fortune, Bloemfontein

Assisted in preparing a Safety, Health & Environmental Risk Assessment.

Engen Oil Refinery, Durban

Assisted in preparing an annual emission report as well as developing a documentation control procedure for hazardous waste disposal.

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