

Reg No. 2017/245931/07 Postal/Physical address: 11 Birkett Court 02 Christie Road Pelham Pietermaritzburg 3201 Phone: 076 822 0733 / 076 341 5101 Email: <u>info@phando.co.za</u> & <u>maivhaj@gmail.com</u> Website: <u>www.phando.co.za</u>

COMPANY PROFILE 2019

Environmental Impact Assessments (Basic Assessment & Environmental Scoping) Environmental Management Programmes (EMPR's) Environmental Control Officers (ECO's) Environmental Advice Rehabilitation Plans Protected species permits and licence applications Water-use licence applications Waste licence applications Mining permits Specialists studies (Ecological, Wetland, and Heritage etc.) GIS work

COMPANY PROFILE

Company background

Established in 2017 Phando Environmental Consulting is based in Pietermaritzburg, KwaZulu-Natal and aims to provide competent and affordable service (*viz.* professional environmental management and environmental assessment services to all industries, particularly in the areas of environmental impact assessment, subsurface assessment, site rehabilitation, Waste Management and air quality management, licence & permit applications etc.) to all clients, whilst maintaining a high standard of environmental accountability. Phando Environmental Consulting is devoted to providing a full set of environmental services for all sectors of investment and development.

Core values

18Phando Environmental Consulting recognizes the need in South Africa for development that is both in harmony with the environment, and in line with progressive growth. We believe in development that is functional, yet sustainable, and it is our primary objective to facilitate a smooth and efficient transition for your company toward this ideal, whilst bearing in mind the necessity for development.

We recognise that obstacles to sustainable development and successful project completion are often the result of interest groups who feel threatened by change and uncertainty about the costs and benefits of alternatives. Overcoming these obstacles requires astute facilitation of public discussion, negotiation and mediation, melded with a thorough knowledge base.

Our aim is to deliver fast, efficient and cost-effective environmental solutions for your business. Our emphasis is on development that is socially, economically and environmentally sustainable.

It is the policy of the members of 18Phando Environmental Consulting that no discrimination is made in terms of colour, creed, or sex in any and/or all capacity involving the company. All projects undertaken by 18Phando Environmental Consulting make use of PDI specialist consultants wherever possible, and the company strives to pass on its expertise to PDI's through outsourcing components of projects as and where possible.

The key personnel have widespread experience in a range of development sectors which include:

- Residential Low income to exclusive estates
- Mining Borrow pits, prospecting, mining permits & rights
- Retail & Commercial Shopping centers to warehousing
- Agriculture & Forestry Effluent lagoons, poultry & piggeries, dams, agri-industrial
- Transportation Rail, bridges, roads, ports
- Renewable Energy Biomass, solar
- Service Infrastructure Landfill sites, water & waste water treatment plants, hospitals, schools
- Eco-tourism & Rehabilitation Tourist venues & accommodation, wetland rehabilitation.
- Industrial & Manufacturing Light to heavy industries, refineries, asphalt facilities

18Phando Environmental Consulting is able to provide direct and personalized services to all clients. We are able to provide fresh, innovative solutions, which uphold environmental sustainability, whilst satisfying the need for socio-economic development.

GEOGRAPHICAL AVAILABILITY

18Phando Environmental Consulting operates throughout South Africa. The company is currently involved in projects in KwaZulu-Natal, predominately in the Infrastructure, Roads, Powerlines, Agricultural, Residential, Cellphone Masts and Mining sectors.

SERVICES

18Phando Environmental Consulting offers the following professional services:

1. Project Management

Within the field of EIA project management we provide a holistic understanding of both project management realities, as well as sound and comprehensive ecological advice, such that decision-making and project goals are achievable and realistic. We will successfully manage large or small-scale environmental projects through:

- Time management;
- Assessment & establishment;
- Budgeting;
- Overall control of all facets of projects including outsourcing of experts;
- Legislative requirements;
- Detailed reporting to project completion; and
- Follow-up & monitoring.

2. EIA Process

All projects will be undertaken in accordance with the requirements of the National Environmental Management Act and Environmental Impact Assessment Regulations of 2014 (Screening – Scoping – EIR - Basic Assessment - EMP)

- Screening and BID initial assessment of viability & necessity;
- Scoping identification of key issues;
 - i. Boundaries of the EIA;
 - ii. Further investigation requirements;
 - iii. Delineation of EIA;
 - iv. Scoping Reports.
- Assessment and mitigation ;
- Environmental Impact Report & presentation;
- Basic Assessment Report & presentation;
- Decision-making and outcomes;
- Environmental Management Plans (EMPs);
- Section 24 G; and
- Auditing and Monitoring Requirements, and Implementation (ECO Duties).

Public participation is integral to all aspects of the EIA process and as such is undertaken throughout the process with different levels of intensity determined by project and legislative needs. In addition, all the above are subject to current South African legislation and we adhere to such regulations.

3. Application Assistance

18Phando Environmental Consulting can provide assistance in obtaining approvals for the following types of environmental applications:

- Environmental Impact Assessment (EIA) applications;
- Waste Management License (WML) applications;
- Waste Management Plans;
- Environmental Management Plan (EMP) approval applications;
- Environmental screening approvals for town planning (PDA) applications;
- Mining Permit applications;
- Indigenous plant / nursery permits; and
- Department of Water Affairs authorizations;
 - i. Water Use Licensing and General Authorizations;
 - ii. Removal / cutting of protected trees.

Various application procedures are inherent in most development portfolios, which we will facilitate or make application for.

4. Geographical Information Systems (GIS) Solutions

From vector line mapping to more complex analysis and decision support solutions, we offer a competitive alternative integrated with, or separate from, our other services which includes the following:

- Thematic mapping;
- Supply of aerial photography and topological maps;
- Development layout plans;
- Feature Digitizing;
- Land use zoning plans;
- Faunal and floral species sensitivity and distribution mapping;
- Geodatabase Management;
- Spatial data analysis and query;
 - i. Slope and aspect analysis;
 - ii. Contouring;
 - iii. View-shed Analysis;
 - iv. 3D Flyovers;
 - v. 3D Terrain Models;
 - vi. Visual impact assessment and mapping;
- EIA Listing Notice 3 (Geographical Areas) mapping queries; and
- Field data capture and mapping utilising a Trimble sub metre accuracy GPS.

5. Wetland and Riparian Services

Wetlands and riparian areas are highly valuable natural systems that perform a variety of ecosystem services, both directly and indirectly related to human well-being. The National Environmental Management Act and several other pieces of legislation recognise the critical need to protect, rehabilitate and conserve wetlands as a history of uninformed and poorly planned infrastructural developments in the vicinity of wetlands has significantly impacted on these important ecological resources in our country. Where proposed developments have the potential to impact on wetland / riparian areas various assessments and tools are required predevelopment to gain an understanding of the natural environment and guide the developmental process. In this regard 18Phando Environmental Consulting has the necessary expertise to undertake the following wetland / riparian assessments and studies to appropriately guide the development process:

- Wetland and riparian screening surveys;
- Wetland delineations as per the procedures described in 'A practical Field Procedure for Identification and Delineation of Wetland and Riparian Areas – Edition 1' (Department of Water Affairs, 2005);
- Wetland Functional Assessments utilising the WET-EcoServices or WetHealth tools; and
- Wetland and riparian rehabilitation and implementation plans.

6. Ecological / Biodiversity Services

In conjunction with our project management and environmental application portfolios we offer various environmental assessment and analysis services.

- Vegetation condition assessments;
- Carrying capacity assessments;
- Flora & fauna descriptions, distributions & analysis ;
- Vegetation rehabilitation plans;
- Erosion control methods and plans;
- Alien invasive plant control management plans;
- Invertebrate surveys;
- Insect ecological studies;
- Insect dietary analyses;
- Ant identification;
- Mammal surveys;
- Avian surveys;
- Reptile and amphibian surveys;
- Botanical surveys;
- Riparian vegetation index surveys;
- Ecological & habitat condition surveys;
- Protected species surveys;
- Biodiversity offsets;
- Ecological Management Plans;
- Biodiversity Action Plans;
- Environmental Management Frameworks;
- Management of Rare Wetland Species;
- Evaluation of land degradation;
- Habitat rehabilitation management plans;

- Rehabilitation monitoring plans; and
- Erosion control plans

7. Development Research, Monitoring and Evaluation

We believe that there is a complex human and ecological dimension to sustainable development. As such, we have the capacity and knowledge to provide exciting analysis, research and input that can positively contribute in the initial planning phases of development proposals, these include:

- Proposal / Project evaluations for both PDA and EIA applications (environmental context);
- Environmental sensitivity and screening reports;
- Utilitarian focused evaluation; and
- Strategic analysis including Logical Framework Approach, Sustainable Livelihoods and Human Scale Development methodology.

8. Independent Environmental Control Officer (IECO)

The IECO is responsible for monitoring all activities on a development site and ensuring that all contractors comply with the requirements of the conditions as stipulated in any environmental authorisation as well as the requirements outlined in the Environmental Management Programme (EMP). The IECO would be on site on a regular basis to assess the project, it aspects and impacts and advises as to the required actions in order to ensure that all legal requirements, best practise protocols, adherence to by-laws etc. are achieved and to attend site meetings.

An IECO should be able to provide environmental awareness training to all staff on a construction site both in the induction phase as well as ongoing throughout the construction phase.

The IECO's duties normally include (but are not limited to) the following:

- Liaising with Client, Contract Manager and the Competent Authority throughout the construction and rehabilitation phases of the project;
- Assissting the Contract Manager and Principal Contractor in ensuring all the necessary environmental authorizations and permits have been obtained and confirming that the activities on the site comply with legislation;
- Writing and/ or advising on method statements for activities that would occur is especially sensitive environments and assisting the Principal Contractor in finding environmentally responsible solutions to problems;
- Inspecting the construction site and surrounding areas regularly with regards to addressing issues of concern that may have a negative impact on the environment;
- Keeping a photographic record of progress on the site from an environmental perspective;
- Ensuring a proactive and effective implementation and management of environmental protection measures;
- Ensuring that the requisite remedial action is implemented appropriately in the event of non-compliance; and
- Prepare an environmental snag-list and close out report after the construction & rehabilitation phases has been completed.

In addition it is common practise that the IECO would also be responsible for the auditing of the site from an environmental aspect which is usually done on a monthly basis. The results of such an audit is then submitted to the environmental competent authority so that they can monitor compliance in terms of National Legislation. Such an audit would also address aspects such as the recommendation of the issuing of penalties to the Contract Manager and Client for repeated or serious contraventions eg. Hazardous chemical/oil spills, dumping of foreign material into sensitive environmental areas such as wetlands and grasslands; destruction of, or damage to protected vegetation; Damage to cultural sites (temples, graves, buildings) etc.

An audit report would contain mitigation measures for each non-compliance issue raised, detail the time frames supplied for the rectification of such non-compliance issues, visual evidence of the site inspection in the form of photographs.

The IECO would also address and ensure that an ethos of progressive rehabilitation takes place throughout the construction phase so as to ensure that the development site is rehabilitated to a high level of environmental integrity that is not only asthetically pleasing but ecologically functional.

KEY PERSONNEL

Key personnel at 18Phando Environmental Consulting carry wealth of experience in the field of environmental consulting:

Jeffrey Maivha (Pr. Sci. Nat.)

Jeffrey Maivha is the Director and Ecologist at 18Phando Environmental Consulting with fields of Specialization in Botany, Ecology, Environmental Science, GIS and Zoology. He has more than seven years' experience in Integrated Environmental Management and has a Bachelor of Science Honours Degree in Botany from the University of Limpopo. He has extensive experience in the management of Basic Assessments, Scoping and EIA processes, as well as the production and implementation of Environmental Management Programmes and Compliance Monitoring. He is also experienced in Environmental Planning and Permit and License Applications (e.g. protected trees licence, Water Use Licences, Mining Permits and Waste Management Licenses). Jeffrey Maivha has worked successfully for a number of large parastatal organisations, corporates and private developers. Jeffrey Maivha is registered with the South African Council for Natural Scientific Professions as a professional Ecologist (Botanist).

Contact Jeffrey Maivha @ Email: maivhaj@gmail.com / info@phando.co.za

Key Clients:

- uMngeni Water
- Richards Bay IDZ
- Umhlathuze Water
 City of Umhlathuze
- Madlankala Primary Cooperative
- Umzumbe Local Municipality
- CIVTECH Engineers
- Sembcorp Siza Water (PTY) Ltd

Examples of project experience and work history:

ITEM	NAME OF PROJECT	Client	TYPE OF PROJECT	VALUE OF PROJECT	STATUS	REFERENCE
2017	Lower Umkhomazi Bulk Water Supply Scheme	Umngeni Water	EIA & EMPr	R300, 000.00	On-Going	
2018	Masinenge bulk sewage pipeline, Margate, Ray Nkonyeni Local Municipality, Ugu District of KwaZulu- Natal.	Ray Nkonyeni Local Municipality.	EIA & Water course assessment studies.	R250, 000.00	Finalized	
2018	The establishment of sewer pipeline and pump station on colwyn drive, sheffield beach, kwadukuza municipality	Sembcorp Siza Water (Pty) Ltd	Ecological Assessment Report	R30 000	Completed	
2018	Establishment of Lake Qhubu Freshwater Fish Farm, Eskhawini, Richards bay	Madlankala Primary Cooperative	EIA & EMPr	R157 000	Ongoing	
2019	Proposed City of uMhlathuze Local Municipality SCM building extention and alteration, Richards Bay, KwaZulu-Natal.	CIVTECH Engineers	Project ECO	R20, 000.00	On-going	

BROAD-BASED BLACK ECONOMIC EMPOWERMENT (BBBEE)

Although Phando Environmental Consulting is a small company, it endeavors to attend to the need for transformation through the implementation of Broad-Based Black Economic Empowerment. Phando Environmental Consulting is 100% black owned and currently holds a Level 1 BBBEE rating.

CONTACT US

	Tel:	076 822 0733		
ACT	Tel:	076 341 5010		
	Email:	<u>info@phando.co.za</u>		
	Website:	<u>www.phando.co.za</u>		
US	Physical:	11 Birkett Court 02 Christie Road		

- Physical: 11 Birkett Court 02 Christie Road Pietermaritzburg 3201
 - Postal: 11 Birkett Court 02 Christie Road Pietermaritzburg 3201