

CURRICULUM VITAE OF MARISSA ILSE BOTHA

PERSONAL INFORMATION

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SUMMARY OF FIELDS

Land Information Technology / GIS (Environmental Mapping and Aerial Photo Interpretation)

Environmental Impact Assessment

Environmental Management Plan / Programmes

EDUCATION

Completed studies:

2003: Matriculated from Nelspruit Hoërskool, Mpumalanga

2004 - Course in Introduction to Wetland Delineation, Department of Water Affairs, Mpumalanga-Nelspruit

2008 - Short course in Geographic Information Systems (GIS), Planet GIS, Lynnwood Pretoria

2004 – Present: 14 years work experience in the field of Environmental Management. Registered as an Environmental Scientist based on Recognition of Prior Learning with SACNASP (registration number 117526).

PROFESSIONAL EXPERIENCE

Present (since 2007): Naledzi Environmental Consultants CC

Position: Environmental Assessment Practitioner
Level of employment: Permanent
Work Station: Polokwane

2005-2007: Enpact Environmental Consultants CC

Position: Assistant Environmental Assessment Practitioner
Level of employment: Permanent

Work Station: Nelspruit

2004-2005: Ecotechnik Environmental Consultants CC

Position: Administrative assistant later progressed to project management

Level of employment: Permanent

Work Station: Nelspruit

Duration of employment: 2004 – September 2005

REGISTRATION/ ACCREDITATION/ CERTIFICATES/ TRAINING

Registered Natural Scientist / Environmental Scientist: South African Council for Natural Scientific Professions. SACNASP Registration: 1

Certificate in Introduction to Wetland Delineation, Department of Water & Sanitation (former Water Affairs) in 2004

Certificate in Geographic Information Systems (GIS), Planet GIS, Lynnwood Pretoria in 2008

KEY RESPONSIBILITIES / PROJECTS COMPLETED

Herewith is an extract of projects undertaken as Environmental Assessment Practitioner under the employ of Naledzi Environmental Consultants CC, Enpact Environmental Consultants CC and Ecotechnik.

- **Samin Group Prospecting Right Application:** Appointed by Samin Group Pty Ltd to carry out an Environmental Impact Assessment in support of a Prospecting Right Application with Bulk Sampling. The prospecting right area is located on state owned land west of the Kruger National Park at Gumbu (also known as Madimbo Corridor) approximately 100km east of Musina in the Limpopo Province. Responsibilities included execution of the EIA Study from start to end and involved public participation, preparation of a Scoping Report, Environmental Impact Report and Environmental Management Programme.
- **Lethaba-Resinga 66kV power line Environmental Authorisation Amendment:** Appointed by Eskom SOC Limited (Distribution: Northern Region) to amend the Environmental Authorisation for the Lethaba-Resinga 66kV power line. The study site is situated at Nkowankowa village in Greater Tzaneen Municipality, Mopani District of Limpopo Province. Responsibilities included public participation process.
- **Medupi Power Station Atmospheric Emission License Variation (AEL):** Appointed by Eskom SOC Limited to conduct a public participation process in support of an AEL variation request. Medupi power station is situated south west of Lephalale town in the Limpopo Province.
- **Ankerlig Power Station Atmospheric Emission License Variation (AEL):** Appointed by Eskom SOC Limited to conduct a public participation process in support of an AEL variation request. Ankerlig power station is situated in Atlantis Industria, Cape Town in the Western Cape Province.

- **Gourikwa Power Station Atmospheric Emission License Variation (AEL):** Appointed by Eskom SOC Limited to conduct a public participation process in support of an AEL variation request. Gourikwa power station is situated approximately 13km west of Mossel Bay, and approximately 1km west of the PetroSA facility, north of the N2 in the Western Cape Province.
- **Karino Urban Development Borrow Pit:** Appointed by Belton Park Trading 27 Pty Ltd to compile and submit an **Environmental Management Programme** in support of a mining permit application for a borrow pit. The mining permit area is located on a Portion of Erf 12, Karino Township 10km east of Nelspruit in the area of Karino, Magisterial District of Nelspruit in Mpumalanga Province. Responsibilities included preparation of the EMPR.
- **New Magalies Cemetery & Waste Transfer station:** Appointed by Mogale City Local Municipality to carry out an **Environmental Impact Assessment** for the construction of a cemetery and waste transfer station with an extent of 8.3 hectares. The study area assessed was approximately 25 hectares. The project site is located on Portion 22 Rietspruit 395JQ 11km west of Magaliesburg in Mogale City Local Municipality, West Rand District Municipality in Gauteng Province. Responsibilities included execution of the EIA from start to end.
- **Luipardsvlei Landfill Site-Expansion area:** Appointed by Mogale City Local Municipality to apply for a Waste Management License Renewal for the Luipaardsvlei Landfill Site - Expansion Area. The process involved bringing the application to the attention of any affected parties/public; submitting the status quo of the landfill site conditions and records of adherence to the standing waste management license through an Application for WML Renewal to GDARD. The project area is located south of Krugersdorp East in the area of Wentworth Park. It is east of Paardekraal Road (M13) and south of Windsor Road (R28) in the jurisdiction of Mogale City Local Municipality in Gauteng Province. Responsibilities included conducting a public participation process.
- **Mining Right for Proposed ‘Geluk Mine’:** Appointed by Rakhoma Mining Resources to conduct an integrated Environmental Impact Assessment Study for an Environmental Authorisation and Waste Management License including an Integrated Water Use License Application in support of a Mining Right Application for the proposed ‘Geluk Mine’. The project entails the development of an iron and vanadium ore surface mine. The application was made in respect of the farms Geluk 512KS, Geluk Oos 513KS and Ironstone 847KS 11km south east of Jane Furse in Sekhukhuneland within the local municipalities of Makhuduthamaga and Greater Tubatse in the Limpopo Province. Responsibilities included limited project management and execution of the EIA from start to end.
- **Hazyview Ext 42 Borrow Pit:** Appointed by Pinzari Limited to compile and submit an Environmental Management Programme in support of a mining permit application for a borrow pit. The mining permit area is located on a Remaining extent of Portion 5, farm De Rust 12 JU 2km south east of Hazyview central business district, Magisterial district of White River in Mpumalanga Province. Responsibilities included preparation of the EMPR.

- **Gemsbokfontein Filling Station:** Appointed by Bidfuel Pty Ltd to compile a Basic Assessment Report and an Environmental Management Programme for the development of a filling station. The project is located on a Portion of Portion 1, farm Gemsbokfontein 199JR next to the R 573 Moloto / Marble Hall road in the settlement of Mabhoko Ext 1, 3km south of Kwaggafontein in Thembisile Hani Local Municipality within Nkangala District Municipality, Mpumalanga Province.
- **Soweto Integration Project:** Appointed by Eskom Holdings SOC to carry out an Environmental Impact Assessment for the Soweto Integration Project on behalf of Eskom Transmission. The project entailed the construction of a 30km, 400kV power line from Etna Substation (Lenasia south) to Quattro Substation (a new proposed substation in proximity to the Soweto Cooling Towers) in Gauteng Province. Responsibilities included conducting the EIA process from start to end.
- **Etna-Glockner Final Walkthrough & EMPr:** Appointed by Eskom Holdings to conduct a Final Walkthrough (field survey) and preparation of a final Environmental Management Programme for the Etna-Glockner 30km, 400kV power line from Glockner (near Vaal Triangle) substation to Etna (near Soweto) substation in the Gauteng Province. Responsibilities included execution of the project from start to end.
- **Erasmus Bonamanzi 132kV power line:** Appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 15km, 132kV power line from Erasmus (Bronkhorstpruit) substation to Bonamanzi (Bronkhorstpruit Dam) substation in the Bronkhorstpruit area, Gauteng Province. Responsibilities included conducting the public participation process, preparing environmental reports, site visits, field work and obtaining environmental authorisation from DEA.
- **Rayton-Bynes 132kV power line:** Appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 12km, 132kV power line from Rayton substation to Bynes substation in the Rayton area, east of Pretoria, Gauteng Province. Responsibilities included preparation of the Basic Assessment Report and Environmental Management Programme.
- **Spitskop-Mamba 132kV power line and substation:** Appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 40km, 132kV power line from Spitskop (Northam) substation to Mamba (Koedoeskop) substation in the Northam/Koedoeskop area, Waterberg District, Limpopo Province. Responsibilities included conducting the EIA Process from start to end.
- **Moedwil-Swartruggens 132kV power line and substation:** Appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 20km, 132kV power line from Moedwil (Moedwil farming area, outside Rustenburg) substation to Swartruggens substation. Responsibilities included conducting the EIA Process from start to end.
- **Madikwe-Derdepoort Road Resurfacing:** Appointed by Limpopo Department of

Roads and Transport to carry out an Environmental Impact Assessment for the upgrade/resurfacing of the Madikwe Game Reserve/Derdepoort Border Post gravel road, South Africa and Botswana periphery, Limpopo Province. Responsibilities included public participation and preparation of environmental reports.

- **Kameni Merensky 132kV power line and substations:** Appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 30km, 132kV power line from the existing Merensky Substation to the proposed 2 new substations at Kennedy's Vale and Kalkfontein, Between the Steelpoort and Roosenekal area, Limpopo Province. Responsibilities included preparation of amended Basic Assessment Report and Environmental Management Programme based on DEA's request to revise the route plan for power line including public participation and obtaining Environmental Authorisation.
- **Cape Malting Plant:** Appointed by Cape Malting House (FABCOS) to carry out an Environmental Impact Assessment for a state of the art Commercial Malt Production Plant in Ritchie, Frances Baard District, Northern Cape Province. Responsibilities included execution of the EIA from start to end. Certain project management aspects were dealt with by Naledzi Environmental Consultants CC MD Desmond Musetsho.
- **Styldrift Phase 1 Project:** Appointed by Royal Bafokeng Platinum to facilitate the consultation of landowners on 7 different farms (various farm portions) identified as possible locations for a proposed Tailings Dam for Rasimone Mine (Royal Bafokeng Platinum) as part of the new Styldrift Phase 1 project in the Rustenburg area. This consultation served to seek consent from landowners to undertake a Geotechnical Investigation on each farm portion forming part of the 7 site options considered. This consultation assisted to select the optimum site alternative and opened further discussions with other mines for procure of land. This project was located in the Phokeng and Boshhoek area, Rustenburg , North West Province;
- **Hartebeestfontein Landfill Site:** Appointed by Madibeng Local Municipality to carry out Basic Impact Assessment and Environmental Management Plan including Waste Management Plan to expand the Hartebeestfontein Landfill Site, Brits, North West Province. Responsibilities included preparing the Basic Assessment Report and Environmental Management Programme. The project was however stalled post submission of reporting for public comment. This project therefore was not concluded.
- **Lebone II College:** Appointed by Royal Bafokeng Administration to carry out a full Scoping and Environmental Impact Assessment Process for the construction of the Lebone II College of the Royal Bafokeng in Rustenburg. Responsibilities included execution of the EIA process from start to end. Certain management aspects of this project were dealt with by Naledzi Environmental Consultants CC MD Desmond Musetsho.
- **Tshilidzini Sasol Filling Station:** Appointed by Tshumisano Trading CC t/a Sasol Tshilidzini Filling Station to undertake the public consultation process and develop an Environmental Report and associated Environmental Management Plan (EMP) in support of the Section 24G Application submitted to Limpopo Department of Economic Development, Environment & Tourism (LEDET) for the unlawful

commencement of a listed activity. Filling Station is located along the Punda Maria Road in the Thohoyandou area, Limpopo Province.

- **Nooitgedacht Prospecting Right Application:** Appointed by Bakwena Ba Phalane Traditional Community and Mantra Mineral Development to undertake a public consultation process and develop a prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of iron ore and several other ore bodies in the Koedoeskop / Nooitgedacht area, Thabazimbi Local Municipality, Limpopo Province.
- **Fanie 578MS Prospecting Right Application:** Appointed by Thanduko Minerals Pty Ltd to conduct a public consultation process and development of the prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of **Coal** north of Louis Trichardt and also north of the Soutpansberge just east of the N1 National Toll Road in the magisterial district of Makhado in the Limpopo Province.
- **Kalkbank Prospecting Right Application:** Appointed by Thanduko Minerals Pty Ltd to undertake the public consultation process and development of the prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of Limestone in the Kalkbank area located halfway between Dendron and Polokwane in the magisterial district of Aganang in the Limpopo Province.
- **Alldays Prospecting Right Application:** Appointed by Naledzi Environmental Consultants CC to undertake the public consultation process and development of the prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of Coal, Iron ore and Copper north east of Alldays on the farms Polton, Salton and Hosselappe in the magisterial district of Musina in the Limpopo Province.
- **Rietfontein Subsidised Residential Development:** Appointed by local government Gauteng Department of Local Government and Housing through a consortium of specialists to conduct firstly a Baseline Assessment for the development site to determine the developable surface and provide initial environmental perimeters/sensitive areas as per the Gauteng C-Plan, environmental constraints as per the EMF of Ekurhuleni. The project proceeded to the conduct of a Full Scoping and EIA process. My responsibilities included executing the Scoping Phase and preparing the draft Environmental Impact Report and EMP. The project was however stalled before the draft EIR was made available for public review due to securing of land tenure.
- **Rayton-Rhinosterfontein-Essellen 132kV power line & substation:** Appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 25km 132kV power line from Rayton Substation to a proposed new Rhinosterfontein substation with associated feeder lines. The study area is located east of Pretoria in a rural-residential area north and south of the N4 at Rayton in Gauteng Province. Responsibilities included execution of the EIA process from start

to end. The final environmental reports were however not submitted for approval to DEA due to continuous public resistance to power line routes considered.

- **Magareng Grain Storage Silos and Collection Facility:** Appointed by BPC Capital to carry out an Environmental Impact Assessment for the construction the 72 000 metric ton Magareng Grain Storage Silos and Collection Facility. The study area is 30 hectares in extent and located north west of Warrenton town on Portion 6 of the farm Fourteen Streams 311RD. It is located along the N12 between Warrenton and Christiana in Magareng Local Municipality of the Francis Baard District in the Northern Cape Province. Responsibilities included review of the Environmental Impact report conducting a public participation meeting.
- **Letaba Risenga Environmental Authorisation Amendment Process:** Appointed by Eskom Distribution to conduct a public participation process in support of an environmental authorisation amendment process for the Letaba Risenga 66kV power line located at Nkowankowa within the Greater Tzaneen Local Municipality of Limpopo Province.
- **Royal Bafokeng Sports Palace (Stadium):** Appointed by Royal Bafokeng Administration to carry out an Environmental Impact Assessment for the construction of Royal Bafokeng Sports Palace in Phokeng in preparation for 2010 World Cup Soccer Tournament in Rustenburg, North West Province. Responsibilities included Environmental Assessment Practitioner responsible for review of specialist studies, preparation of Basic Assessment Report and submission to North West Department of Rural, Environment and Agricultural Development. Project management was done by Naledzi Environmental Consultants CC MD Mr Desmond Musetsho.
- **Thulani Section Land Tenure Upgrading:** Appointed by local government to survey and capture all stand details within the Thulani Section of Matsulu, as well as document details of current occupants for registration of title deeds. Entailed excessive public consultation, community liaison and field work. Matsulu is located 27km east of Nelspruit in Mbombela Local Municipality of Mpumalanga Province.

Extent of work Experience and level of participation in projects under Enpact Environmental Consultants CC: This is a shortened list of some of the projects which I can still recall.

- **Maggiesdal Residential Development:** Appointed by HL Hall and Sons to carry out and Environmental Impact Assessment for the proposed development of Maggiesdal Residential Development. The extent of the development site is approximately 10 hectares and located west of the R40 Barberton/White River Road directly south of Stonehenge residential area, magisterial district of Nelspruit, Mbombela, Ehlanzeni District Municipality, Mpumalanga Province. Responsibilities included Environmental Assessment Practitioner responsible for the project from start to end. Some project management aspects were handled by Senior EAP Mr. Heinrich Kammeyer from Enpact CC.

➤ **Mountain View Estate, Residential Development (Drumrock 2nd Phase):** Appointed by Pierre Zondach / aka Drumrock Country Estate to carry out an Environmental Impact Assessment for the proposed Mountain View Estate. The development site is in excess of 20 Hectares located east of the R40 Nelspruit/White River Road at Drumrock; this would be north of Nelspruit town, Mbombela Local Municipality, Ehlanzeni District Municipality, Mpumalanga Province. Responsible for the EIA process from start to end. Some project management aspects were handled by Senior EAP Mr. Heinrich Kammeyer from Enpact CC.

➤ **Shandon Heights (Phase 4) and Access Road:** Appointed by Civicon Engineers to carry out an Environmental Impact Assessment for the proposed Shandon Heights Phase 4 upmarket residential estate and associated access road. The development site is in excess of 20 Hectares located east of Dr Enos Mabuza Drive bordering the suburb of Steiltes. This area is located on the eastern outskirts of Nelspruit, north of the existing Shandon Estate residential area, Mbombela Local Municipality, Ehlanzeni District, Mpumalanga Province.

The proposed access road was planned to route through a public open space intended for as a nature reserve. The access road would route from Dr Enos Mabuza Drive, north of Columbus Street into Shandon Heights. Responsible for the EIA process from start to end. Some project management aspects were handled by Senior EAP Mr. Heinrich Kammeyer from Enpact CC.

Karino Urban Development: Appointed by Belton Park Trading 27 (Pty) Ltd aka Laeveld Trust to carry out an Environmental Impact Assessment for the proposed Karino Urban Development. The development site is approximately 500 Hectares in extent. It is located on previously cultivated agricultural land near the settlement of Karino. The various properties on which the EIA was conducted were located on either side of the D636 road between Karino and Plaston, Mbombela Local Municipality, Ehlanzeni District, Mpumalanga Province. Responsible for the EIA process from start to end. Some project management aspects were handled by Senior EAP Mr. Heinrich Kammeyer from Enpact CC.

➤ **Sabie Incinerator for Sabie Waste Water Treatment Works:** Appointed by Thaba Chweu Local Municipality to carry out an Environmental Impact Assessment and application for a CAPCO permit for the proposed installation of an Incinerator at Sabie Waste Water Treatment Works. It is located within the existing Sabie WWTW on the banks of the Sabie River outside the town of Sabie, Thaba Chweu Local Municipality, Ehlanzeni District, Mpumalanga Province. Environmental Assessment Practitioner responsible for project, overall project management by Mr Heinrich Kammeyer.

➤ **Katoen Industrial / Commercial Development:** Appointed by a private developer to carry out an Environmental Impact Assessment for the proposed Katoen Industrial Development at Rocky's Drift, north of Nelspruit, Mpumalanga. The development involved the development of a motor service and repair premises adjacent to the R40 Nelspruit/White River Road. Responsibilities included verify concerns from competent authority, revise EIA Report and EMP, response to CA concerns and obtain environmental authorisation.

- **White River Residential Extension (north of Colts Hill):** Appointed to carry out an Environmental Impact Assessment for an upmarket residential expansion north of Colts Hill suburb in northern outskirts of White River town, (accessed from Oaks Road) Mbombela Local Municipality, Ehlanzeni District, Mpumalanga Province. The extent of the site under assessment was approximately 12 hectare. Project is located west of Danie Joubert Street, Colts Hill, amid Oaks Road Agricultural Holdings. Responsibilities included the EIA Process from start to end, some project management aspects were done by Mr Heinrich Kammeyer from Enpact CC.
- **SAPS Radar Masts:** Appointed by the South African Police Service (Nelspruit Office) to carry out an Environmental Impact Assessment for the construction of 3 SAPS radar masts to augment a wide-ranging radar system to monitor the N4 Highway Nelspruit to Maputo corridor and other important transport routes. All three masts were located within the Mpumalanga Province. Positions of the 3 radar masts included; Mauchberg (Graskop); mountain west of Kwena Dam (west of R36), Gustav Klingbiel Nature Reserve (Lydenburg). It required an Environmental Authorisation (Basic Assessment), Civil Aviation Authority Registration - Application to register masts (due to height of structure and potential risks to aircraft).

Responsibilities:

- Preparation and submission of Application for Environmental Authorisation
- Preparation and submission of Application for Registration of Masts with CAA
- Site Visit and field investigation to determine potential impacts of masts on environment;
- Public Participation Process
- Preparation of Basic Assessment Reports and Environmental Management Plans
- Obtain Environmental Authorisation and notification of I&APs
- Obtain CAA Registration Certificates for masts.

Extent of work Experience and level of participation in projects under Ecotechnik

Environmental Consultants CC: This is a shortened list of some of the projects which I can still recall.

- **Lebokwakgomo Filling Station:** Appointed by a private developer to carry out an Full Environmental Impact Assessment for the construction of a filling station along the R37, 40km south of Polokwane in the village of Lebowakgomo in Limpopo Province. Responsibilities included administrative assistant to Senior EAP in public participation process.
- **Masibekela Bulk Water Pipeline and Reservoir:** Appointed by Nkomazi Local Municipality to carry out an Environmental Impact Assessment for the construction of a bulk water pipeline, reservoir and reticulation system for the village of Masibekela, situated along the R571 close to the Swaziland Mananga Border Post, Komatipoort area, Mpumalanga. Responsibilities included being an assistant in Public Participation Process and EIA Process.

- **Kamaqhekeza Storm Water Management System:** Appointed by Nkomazi Local Municipality to carry out an Environmental Impact Assessment for the construction of a storm water management system for the rural settlement of Kamaqhekeza, Magisterial District of Komatipoort, Nkomazi Local Municipality, Mpumalanga. Responsibilities included Public Participation Process Administrative Assistant to EAP, comments and responses to I&APs and Stakeholders (reviewed by EAP), public participation site inspection.
- **Upgrading of Elandshoek Bus Route:** Appointed by local government to carry out an Environmental Impact Assessment for the upgrading/repair of the Elandshoek bus route include a new bridge and bus parking bays to the Elandshoek village, Magisterial District of Nelspruit, Mbombela Local Municipality, Mpumalanga. Responsibilities included administrative assistant to EAP.
- Renewal of Environmental Authorisation (then Record of Decision) for Five Assegai Country Estate Storage Dams, Badplaas / Machadodorp, Mpumalanga Province.
- Full Scoping and EIA for the construction of Matumi Extensions (Residential Development), Nelspruit, Mpumalanga Province.
- Full Scoping and EIA for Construction of Ready Mix Concrete Plant, White River Industrial Area, Mpumalanga.