

Appendix E

ADDITIONAL INFORMATION

Appendix E1

EAP DECLARATION AND EXPERTISE



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DETAILS OF EAP AND DECLARATION OF INTEREST

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|------------------------|-------------------------|
| | (For official use only) |
| File Reference Number: | 12/12/20/ or 12/9/11/L |
| NEAS Reference Number: | DEA/EIA |
| Date Received: | |

Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

PROJECT TITLE

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| Working For Wetlands Programme: Free State |
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| Environmental Assessment Practitioner (EAP): | Aurecon South Africa Pty (Ltd) | | |
| Contact person: | Franci Gresse | | |
| Postal address: | PO Box 494 | | |
| Postal code: | 8000 | Cell: | - |
| Telephone: | 021 526 6022 | Fax: | 021 526 9500 |
| E-mail: | Franci.Gresse@aurecongroup.com | | |
| Professional affiliation(s) (if any) | Ms Gresse served on the committee of the South African affiliate of the International Association for Impact Assessment (IAIASa) for the Western Cape Branch from 2009 to 2011, and remains a member. | | |

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

4.2 The Environmental Assessment Practitioner

I, **Franci Gresse**, 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;

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.



Signature of the environmental assessment practitioner:

Aurecon South Africa (Pty) Ltd

Name of company:

09 November 2017

Date:



Franci Gresse

Franci is a senior environmental practitioner in Aurecon's Cape Town office. She has been involved in various environmental investigations, including environmental impact assessments (EIA's), environmental management plans (EMP's), environmental management programmes (EMP's), rehabilitation plans maintenance management plans (MMP's) and fatal flaw analysis.

Franci has been involved with the Working for Wetlands rehabilitation programme for the past five years, of which she has been acting as the Team Leader for the environmental assessment practitioners (EAP's) for the last three years. The Working for Wetlands project won the 2012 Aurecon Chairman's Award for its positive contribution to the natural and social environment. In addition, Franci has also been involved with a number of projects in the renewable energy sector.

Franci served on the committee of the South African affiliate of the International Association for Impact Assessment (IAIA) for the Western Cape Branch from 2009 to 2011, and remains a member. She completed a Bachelor of Science and an Honours Degree in Conservation Ecology at the University of Stellenbosch (South Africa).

Qualifications

BSc (Hons) Conservation Ecology

Member, International Association of Impact Assessment (IAIA)

Specialisation

Environmental Impact Assessment Practitioner

Years in industry

8.08

Experience

Working for Wetlands plan 2016 - 2018, Regional South Africa, Department of Environmental Affairs: Natural Resource Management Directorate, 06/2016 - Date, Project Leader

The Natural Resource Management Directorate of the Department of Environmental Affairs appointed Aurecon to provide environmental and engineering services for the Working for Wetlands Programme which is a national wetland rehabilitation programme. Responsibilities include the management and coordination of the overall project, management of the environmental authorisation component of the project, as well as the compilation of basic assessment reports (BAR) for the country. Other responsibilities include the compilation of wetland rehabilitation plans for the Western Cape, Northern Cape and Limpopo Provinces, liaison with authorities and the public (public participation process) and management of wetland specialists.

Integrated Environmental Impact Assessment (EIA) for the proposed extension of the Ash Dam facility at Kriel power station, Mpumalanga Province, South Africa, Eskom Holdings, 06/2016 - date, Project Leader

Appointed by Eskom to conduct an integrated environmental impact assessment (EIA) for the proposed construction of a fourth ash dam facility at the Kriel power station. Responsible for the general project management and finances, authority liaison and the compilation and review of the EIA documentation.

Amended Environmental and Socio-Economic Impact Assessment for a concentrated solar plant facility near Arandis in the Erongo Region, 02/2016 – 10/2016, Project Leader

Aurecon was appointed by the NamPower to amend the Environmental Clearance Certificate (ECC) issued for the Erongo Coal-fired Power Station at Arandis, to a Concentrated Solar Plant. Responsibilities included project management (programme, finances and client expectations), liaison with authorities and relevant stakeholders, review of specialist reports and the compilation and review of the Amendment Report.



Franci Gresse Senior Environmental Impact Assessment Practitioner

Table Mountain Group (TMG) Aquifer feasibility study and pilot project, Western Cape Province, South Africa, City of Cape Town, 2015 - date, Environmental Consultant

The TMG Aquifer Feasibility Study and Pilot Project was initiated in 2002 and is a long term planning initiative to investigate the groundwater potential of the TMG Aquifer as a water source to augment Cape Town's water supply. Given the recommendations in the Exploratory Phase report, and the fact that the TMG Aquifer has since been utilised as a water resource in areas such as Hermanus and Oudtshoorn, the City of Cape Town decided to omit the Pilot Phase and rather proceed with an extended Exploratory Phase, which would include limited pump testing. Aurecon was appointed to undertake the extended Exploratory Phase work. Responsibilities include the compilation of Environmental Management Plans for the additional test sites, liaison with the relevant authorities and landowners and management of the Environmental Control Officers on the project.

Implementation of the Hoekplaas environmental authorisation (EA), Northern Cape Province, South Africa, Mulilo Renewable Energy, 11/2013 - 05/2015, Project Leader

Aurecon assisted the holder of the environmental authorisation (EA) for the 100 MW photovoltaic (PV) facility in De Aar with the implementation of the environmental conditions to ensure compliance to all relevant environmental legislation. Responsible for the management of tasks and review of all documentation. Also assisting client with questions on the environmental impact assessment (EIA) process.

Environmental impact assessment and compilation of an environmental management plan (EMP) for the Swakopmund-Mile 7 Water Supply, Phase 2, Swakopmund, Namibia, NamWater, 11/2013 - 10/2015, Project Leader

NamWater appointed Aurecon to assist with the environmental impact assessment process for the proposed construction of a new bulk water pipeline between Swakopmund and Mile 7. Responsible for the management and review of the environmental impact assessment (EIA) reports and processes, as well as the project's finances.

Working for Wetlands plan 2014 - 2016, Regional South Africa, South African National Biodiversity Institute (SANBI), 06/2013 – 05/2016, Task Leader

The South African National Biodiversity Institute (SANBI) appointed Aurecon to provide environmental and engineering services for the Working for Wetlands Programme which is a national wetland rehabilitation programme. Responsible for the management of the environmental authorisation component of the project, as well as the compilation of basic assessment reports (BAR) for the country. Other responsibilities include the compilation of wetland rehabilitation plans for the Western Cape, Northern Cape, North West and Limpopo Provinces, liaison with authorities and the public (public participation process) and management of wetland specialists.



Franci Gresse Senior Environmental Impact Assessment Practitioner

Maintenance management plans (MMP's) for flood damaged road infrastructure, Western Cape Province, South Africa, Western Cape Provincial Government Department of Transport and Public Works, 06/2013 - Date, Project Staff

The project entails the compilation of maintenance management plans (MMP's) for two local municipal areas (Laingsburg and Worcester), as well as obtaining the necessary permits/ water use authorisations. Personally involved during the project commencement with regards to strategy development, meetings with the relevant authorities and assistance with the development of the MMP's.

Environmental impact assessment (EIA) for the expansion of approved solar energy facilities located near Prieska and De Aar, Northern Cape Province, South Africa, Mulilo Renewable Energy, 03/2013 - 09/2015, Phase Leader

Mulilo Renewable Energy decided to expand the approved solar energy facilities on the farms Hoekplaas and Klipgats in Prieska, as well as on the farms Badenhorst Dam and Du Plessis Dam in De Aar. The expansion of Hoekplaas farm in Prieska includes ten additional 75 MW photovoltaic (PV) facilities and six additional PV units at Klipgats Pan farm. The expansion at Badenhorst Dam farm includes four additional 75 MW PV facilities and three additional PV units at Du Plessis Dam farm. Responsible for the management and review of the environmental impact assessment (EIA) reports and processes, as well as the project's finances.

Fatal flaw study for two potential Wind Energy Facility (WEF) sites, Northern and Western Cape Provinces, South Africa, Juwi Renewable Energies (Pty) Ltd, 03/2013 - 04/2013, Environmental Practitioner

The study entailed a fatal flaw analysis of two potential wind energy facility (WEF) sites in the Northern and Western Cape Provinces. Responsible for the assessment of the sites and compilation of the fatal flaw report.

Richtersveld wind energy facility (WEF), Northern Cape Province, South Africa, TRE Tozzi Renewable Energy S.p.A and Guma Group, 07/2012 - 09/2013, Environmental Practitioner

The project entailed a due diligence of the proposed wind energy facility (WEF) to review compliance with the requirements of the Department of Energy's independent power producer (IPP) process. Responsible for the review of the environmental reports and compilation of the due diligence report.

Three photovoltaic (PV) energy facilities near Copperton, Northern Cape Province, South Africa, Mulilo Renewable Energy (MRE), 09/2011 - 05/2015, Environmental Practitioner

The project entailed three environmental impact assessments (EIA's) for three photovoltaic (PV) energy facilities comprising 75 MW to 150 MW, located near Copperton. Responsible for the management the EIA process and project specialists, compilation of scoping and EIA reports and liaison with authorities.

Fatal flaw study for four potential wind energy facility (WEF) sites, Northern and Western Cape Provinces, South Africa, Mainstream Renewable Power South Africa, 11/2011 - 05/2012, Environmental Practitioner

The study entailed a fatal flaw analysis of four potential wind energy facility (WEF) sites across the Northern and Western Cape Provinces. Responsible for the management of specialists, review of reports, assessment of the sites and compilation of the fatal flaw report.



Franci Gresse Senior Environmental Impact Assessment Practitioner

Implementation of the Klipgats Pan environmental authorisation (EA), Northern Cape Province, South Africa, Mulilo Renewable Energy, 09/2011 - 05/2015, Project Leader

Aurecon was appointed to undertake three environmental impact assessments (EIA's) for three proposed photovoltaic (PV) solar energy plants near Copperton. The first PV solar energy plant will generate around 100 MW (preferred alternative) or 150 MW (alternative) on the Hoekplaas Farm (Farm 146/RE). The proposed PV plant will cover approximately 300 ha (preferred alternative) or 450 ha (alternative). The second includes a PV solar energy plant to generate roughly 100 MW on the farm Klipgats Pan (Farm 117/4) near Copperton in the Northern Cape. The proposed PV plant will cover an estimated 300 ha. An alternative site for a 100 MW PV plant with a 300 ha footprint is also being considered. The third comprises a PV solar energy plant to generate about 100 MW (preferred alternative) or 300 MW (alternative) on the farm Struisbult (Farm 104, portion 1) which will cover 300 ha to 900 ha. Responsible for managing tasks and reviewing all documentation for updating the environmental management plan (EMP) and implementing the environmental authorisation (EA). Also assisted client with questions on the EIA process.

Proposed rehabilitation of Wetlands as part of the Working for Wetlands, Regional, South Africa, South African National Biodiversity Institute (SANBI), 08/2011 - 09/2013, Environmental Practitioner

Appointed by the South African National Biodiversity Institute (SANBI) to conduct environmental impact assessments (EIA's) for the rehabilitation of specific wetlands in all provinces of South Africa over a five year period. Responsible for the compilation of basic assessment reports (BAR) and Wetland Rehabilitation Plans for the Western Cape, Northern Cape, Gauteng and Limpopo Provinces. Other responsibilities included liaison with authorities, public participation process, management of specialists and general project management of the environmental component of the project.

Repair of flood damage to road structures in the Eden District Municipality, Western Cape Province, South Africa, Western Cape Provincial Department of Transport and Public Works, 01/2011 - Date, Environmental Practitioner

The project entails the compilation of maintenance management plans (MMP) for seven areas within the Eden District Management Area to repair. Responsible for compilation of MMP's, review of reports and liaison with stakeholders and authorities.

Environmental impact assessment (EIA) for the proposed extension of the Ash Dam facility at Kriel power station, Mpumalanga Province, South Africa, Eskom Holdings, 11/2009 - 12/2015, Environmental Practitioner

Appointed by Eskom to conduct an environmental impact assessment (EIA) for the proposed construction of a fourth ash dam facility at the Kriel power station. Responsible for the general project management and finances, screening process, compilation of the scoping and EIA reports, public participation and the compilation of a waste management licence application.



Franci Gresse Senior Environmental Impact Assessment Practitioner

Environmental impact assessment (EIA) for proposed relocation of solar energy facility, Onder Rietvlei Farm, Aurora, Western Cape Province, South Africa, Solaire Direct Southern Africa, 2010 - 2011, Project Leader

Appointed by Solaire Direct to undertake a basic environmental impact assessment (EIA) process for the proposed relocation of an approved, but not yet constructed 10 MW solar energy facility. Responsible for the management and review of the EIA process and finances.

Environmental impact assessment (EIA) for proposed solar energy facility, Onder Rietvlei Farm, Western Cape Province, South Africa, Solaire Direct Southern Africa, 07/2010 - 02/2012, Environmental Practitioner

Appointed by Solaire Direct to undertake a basic environmental impact assessment process for the proposed construction of a 10 MW solar energy facility. Responsible for the compilation of the draft and final reports, public participation process, management of specialists and general project management.

Proposed Paarl Mountain and Ysterbrug pumping main upgrades, Western Cape Province, South Africa, Drakenstein Municipality, 06/2010 – 12/2015, Environmental Advisor

The Drakenstein Municipality appointed Aurecon's engineers to investigate and plan the proposed upgrade of the Paarl Mountain and Ysterbrug Pumping Scheme. The upgrading of the pipelines feeding the Meulwater Water Treatment Works from the Bethel and Nantes dams, also part of this scheme, was also investigated. Responsible for providing advice on environmental processes required. Other responsibilities included the management of the independent environmental assessment practitioner and the review of all environmental impact assessment (EIA) documentation.

Environmental sensitivity study (ESS) for a proposed solar energy facility on a farm Near Aurora, Western Cape Province, South Africa, Solaire Direct Southern Africa, 2010, Environmental Practitioner

Appointed to provide an environmental sensitivity study (ESS) which inter alia highlights the potential constraints ('red flags') and opportunities presented by the site from an environmental perspective. Responsible for the compilation of the ESS.

Proposed remediation, rehabilitation and restoration of the Spruit, Krom, Leeu and Palmiet Rivers, Western Cape Province, South Africa, Drakenstein Municipality, 2009 - 2010, Environmental Practitioner

Appointed by the Drakenstein Municipality to undertake the requisite environmental impact assessment (EIA) process for the rehabilitation, remediation and stabilisation of four rivers in Paarl and Wellington. Responsible for the EIA and public participation processes.

Proposed construction of a new pipeline from Bovlei Winer to Withoogte Dam, Wellington, Western Cape Province, South Africa, Drakenstein Municipality, 2009 - 2010, Environmental Practitioner

The Drakenstein Municipality proposed to replace a section of the existing pipeline extending from the Withoogte Dam to the Welvanpas Reservoir near Wellington as part of the municipality's water master plan in order to improve the overall water supply. Responsible for the compilation of the environmental impact assessment (EIA) report, management of specialists and the public participation process.



Franci Gresse Senior Environmental Impact Assessment Practitioner

Proposed erection of Eskom communication sirens and public announcement (PA) systems, Blaauwberg, Western Cape Province, South Africa, Eskom, 2009 - 2010, Environmental Practitioner

The project entailed three environmental impact assessment (EIA) processes for the (a) erection of 10 new sirens in the Parklands area, (b) the relocation of one siren in Bloubergstrand, and (c) the upgrade of five sirens on farms near Melkbosstrand. Responsible for compiling environmental impact assessment (EIA) reports, and the public participation process.

Overberg District Municipality integrated transport plan (ITP) strategic environmental informants, Western Cape Province, South Africa, Overberg District Municipality, 2009, Environmental Practitioner

Aurecon's Transportation Unit was appointed to revise the integrated transport plan (ITP). The Environmental Unit was subcontracted to provide environmental input. Responsible for identifying and describing the relevant informants.

Annandale Commercial: development of petrol filling station on portion of Erf 5561, Kuils River, Western Cape Province, South Africa, Communicate, 2009, Environmental Practitioner

Appointed to compile a construction environmental management plan (CEMP) for the construction of a filling station on the corner of Gladioli Street and Amandel Drive, Kuils River. Responsible for the compilation of the project specification document as part of the CEMP.

Environmental impact assessment (EIA) for the proposed Langezandt Quays development in Struisbaai Harbour, Western Cape Province, South Africa, Golden Falls (Pty) Ltd, 2008 - Date, Environmental Practitioner

Aurecon was appointed to undertake an environmental impact assessment (EIA) process for the proposed development of a four storey development on Erf 848 within the Struisbaai harbour precinct. Responsible for drafting responses to the Department of Environmental Affairs' independent review report on the proposed development.

Pre-feasibility and feasibility studies for augmenting the Western Cape water supply system, South Africa, Department of Water Affairs (DWA), 2008 - 2013, Project Staff

The Department of Water Affairs commissioned pre-feasibility and feasibility studies for the augmentation of the Western Cape water supply system through the further development of the surface water resources. Surface water schemes to be investigated were identified by the Western Cape water supply system reconciliation strategy study. Responsible for the public participation process, managing environmental specialists, and compiling a socio-economic overview of the study area.

Proposed redevelopment of the Blaauwberg Conservation Area: Eerstestein Node, Western Cape Province, South Africa, City of Cape Town, 2008 - 2010, Environmental Practitioner

The project entailed an environmental impact assessment (EIA) process for redeveloping the Eerstestein Conservation Area on the West Coast. Responsible for compiling the EIA report, as well as managing specialists and the public participation process.



Franci Gresse Senior Environmental Impact Assessment Practitioner

Table Mountain Group aquifer feasibility study and pilot project, Western Cape Province, South Africa, City of Cape Town, 2008 - 2010, Environmental Control Officer

The City of Cape Town initiated a study into the Table Mountain Group Aquifer as a potential water source to augment the city's supply. The feasibility and pilot project phase record of decision (RoD) required completion for site-specific environmental management plans (EMP's) for drilling sites that were assessed to be environmentally sensitive. Site-specific EMP's were designed for sensitive sites to ensure minimal environmental impact during the drilling phase. Responsible for monitoring compliance with the RoD and EMP during the drilling phase.

Water reconciliation strategy for the Algoa water supply area, Eastern Cape Province, South Africa, 2008 - 2009, Environmental Practitioner

This project provided an assessment of the environmental opportunities and constraints for a suite of water schemes in the Algoa water supply area. This was undertaken as part of a broader study in the area.

Application for rectification in terms of Section 24G of the National Environmental Management Act (NEMA) for the unlawful commencement of a fruit processing factory on Op de Tradouw Farm, Number 69, Barrydale, Western Cape Province, South Africa, Schoonies Family Trust, 2008 - 2009, Environmental Practitioner

The project consisted of an application for rectification in terms of Section 24G of NEMA. Responsible for compiling an environmental impact report and an environmental management plan (EMP) for the application, as well as managing the public participation process.

Proposed development of apple and pear orchards on Soetmelksvlei Farm, Western Cape Province, South Africa, BETCO, 2008 - 2009, Project Staff

This Agri-development project involved the development of 50 ha of apple and pear orchards in the Riviersonderend region. Responsible for compiling the basic assessment report, environmental management plan (EMP), and managing the specialists and public participation process.

C.A.P.E. Olifants-Doring Catchment Management Agency project: Development of a catchment management strategy water resource protection sub-strategy for the Olifants-Doring Catchment, South Africa, CapeNature, 2008 - 2009, Environmental Practitioner

Appointed by CapeNature to compile a catchment management strategy water resource protection sub-strategy for the Olifants-Doorn catchment. Responsible for compiling a database that lists all institutions and their respective mandates in terms of water resource protection and biodiversity conservation decision making for the Olifants-Doring Catchment, workshop arrangements, and general project related work.

Environmental sensitivity study for the proposed Dasdrif poultry farm in Moorreesburg, Western Cape Province, South Africa, Eikenhoff Poultry Farms (Pty) Ltd, 2008, Project Staff

The project consisted of an environmental sensitivity study (ESS) which, inter alia, highlighted the potential constraints ('red flags') and opportunities presented by the site from an environmental perspective. Responsible for compiling the ESS.

Appendix E2

SPECIALIST DECLARATION AND EXPERTISE



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

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|------------------------|-------------------------|
| | (For official use only) |
| File Reference Number: | 12/12/20/ or 12/9/11/L |
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| Date Received: | |

Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

PROJECT TITLE

Working For Wetlands: Free State

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|--------------------------------------|---|-------|---|
| Specialist: | GroundTruth | | |
| Contact person: | Craig Cowden | | |
| Postal address: | 09 Quarry Road, Hilton | | |
| Postal code: | 3245 | Cell: | - |
| Telephone: | 033 343 2229 | Fax: | - |
| E-mail: | Craig@groundtruth.co.za | | |
| Professional affiliation(s) (if any) | SACNASP- Ecological Science (400197/05) | | |

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|---------------------|--------------------------------|-------|--------------|
| Project Consultant: | Aurecon South Africa Pty (Ltd) | | |
| Contact person: | Franci Gresse | | |
| Postal address: | PO Box 494 | | |
| Postal code: | 8000 | Cell: | - |
| Telephone: | 021 526 6022 | Fax: | 021 526 9500 |
| E-mail: | Franci.Gresse@aurecongroup.com | | |

4.2 The specialist appointed in terms of the Regulations_

I, Craig Cowden, declare that --

General declaration:

I act as the independent specialist 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 the specialist report relevant to this application, 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 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;

all the particulars furnished by me in this form are true and correct; 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.



Signature of the specialist:

Ground Truth

Name of company (if applicable):

7 November 2017

Date:

Curriculum Vitae – Craig Cowden

Personal Details:

Name: Craig Cowden
Profession: Wetland Ecologist
Date of Birth: 14 March 1978
Nationality: South African



Key Qualifications:

Seventeen years' experience in ecosystem functioning and management, specializing in wetland ecosystems. Involvement in a variety of studies to determine practical and applied ecological solutions. Specialist input into various studies, focusing on:

- Mapping and infield delineation of wetland habitat within various regions of Southern Africa, including South African provinces of KwaZulu-Natal, Mpumalanga, Free State, Eastern Cape and Gauteng, and Lesotho for inventory and management purposes.
- Assessment of various wetland ecosystems to highlight potential impacts, within current and proposed landscape settings, and recommend appropriate mitigation and offsets based on assessing wetland ecosystem service delivery (functioning) and ecological health/integrity.
- Assessment of various wetland ecosystems to plan appropriate wetland rehabilitation activities and performance evaluation and monitoring of wetland rehabilitation projects.
- Literature reviews and research relating to impacts, best management practices, promoting biodiversity, monitoring and evaluating rehabilitation within wetland ecosystems.

Education and Training:

- 2017 MSc (Environmental Science) Rhodes University, Grahamstown. MSc has been accepted pending corrections.
- 2017 Wetland Delineation Course - Wetland Training Institute, Convington (Louisiana), USA.
- 2017 Natural Processes for the Restoration of Drastically Disturbed Sites. VII World Conference on Ecological Restoration, Foz do Iguassu, Brazil, August 26, 2017.
- 2015 A Methodology for Determining Buffer Zones for Rivers, Wetlands and Estuaries. National Training and Development Workshop, Pretoria, Gauteng, November 24-25, 2017.
- 2005 Wetland Assessments to Inform Wetland Rehabilitation Planning - University of KwaZulu-Natal.
- 2001 Forest Certification Course - SGS Qualifor.
- 2001 Wetland Rehabilitation Planning and Implementation - Mondi Wetlands Project.
- 1999 B.Sc. (Agriculture) University of Natal, Pietermaritzburg – Four-year Degree (Honours equivalent), majoring in Wildlife Science & Zoology.

Professional Memberships:

- Professional Natural Scientist (Pr.Sci.Nat) in Ecological Science - The South African Council for Natural Scientific Professions (Reg. No. 400197/05)
- Founding Member - South African Wetland Society
- Member -Society of Wetland Scientists (International)
- Member -Society of Ecological Restoration (International)

Professional Awards:

- National Wetland Award under the "Stewardship" category awarded in 2013 in recognition of the wetland rehabilitation associated with the Greater Edendale Mall development.
- Mondi Wetlands Programme acknowledgment of "Contributions towards wetland conservation" awarded in 2012.

Experience Record:

2009 to Present: GroundTruth (GT) - Management of the wetland division within GT.

2001 to 2009: Land Resources International (LRI) - Management of the environmental division within LRI.

Examples of Projects:

- Implementation of wetland rehabilitation planning in various provinces, including KwaZulu-Natal, Mpumalanga, Limpopo, Gauteng, Free State and Western Cape for the Working for Wetlands Programme from 2005-2012, 2016-2018.
- Wetland specialist input and support to Burundi Nature Action and Association pour la Conservation de la Nature au Rwanda on behalf of the International Union for the Conservation of Nature – Netherlands Committee.
- Assessments of impacted wetland systems and rehabilitation planning to inform the offset requirements for proposed development at the Cascades Mall in Pietermaritzburg.
- Assessments of impacted wetland systems and rehabilitation planning to inform the offset requirements for Exxaro coal mining operations.
- Assessment of wetland systems potentially affected by the proposed expansion of Lumwana Mine near Solwezi, Zambia on behalf of SRK Consultants.
- Water Research Commission research project on developing a monitoring and evaluation framework to assess wetland rehabilitation in South Africa.

Publications

- **Cowden C**, Kotze DC, Ellery WN & Sieben EJJ. 2014. *Assessment of the long-term response to rehabilitation of two wetlands in KwaZulu-Natal, South Africa*. African Journal of Aquatic Science, Vol. 39, No. 3.
- Rivers-Moore NA, **Cowden C**. 2012. *Regional prediction of wetland degradation in South Africa*. *Wetlands Ecology and Management*, DOI 10.1007/s11273-012-9271-5.
- Macfarlane DM, Walters D & **Cowden C**, 2011. A wetland health assessment of KZN's priority wetlands. Draft Unpublished Report prepared for Ezemvelo KZN Wildlife, Pietermaritzburg.
- **Cowden C** & Kotze DC, 2009. WET-RehabEvaluate: Guidelines for the monitoring and evaluation of wetland rehabilitation projects. WRC Report No. TT 342/08, Water Research Commission, Pretoria.
- Kotze DC, **Cowden C**. 2009. KZN Biodiversity Stewardship Programme: Guidelines for the *in situ* Management of Ecosystems in KwaZulu-Natal, according to Biodiversity Conservation Principles – Wetlands. Unpublished Report prepared for Ezemvelo KZN Wildlife by Land Resources International, Pietermaritzburg.
- **Cowden C**, Ellery W, Kotze D, Grenfell M, McCulloch D, Woods D, Grenfell S, Bambus O. 2009. *Performance evaluation of the wetland rehabilitation undertaken at Killarney Wetland in Ntsikeni Nature Reserve, KwaZulu-Natal Province* **In** Kotze DC, Ellery WN. 2009. *WET-OutcomeEvaluate: An Evaluation of the rehabilitation outcomes at six wetland sites in South Africa*. WRC Report No. TT 343/09. Water Research Commission, Pretoria.

Conference Presentations:

- **Cowden C**, Kotze D, Walters D, Browne B. Monitoring and evaluation framework for wetland restoration in South Africa, using an urban wetland case study. *Presented during VII World Conference on Ecological Restoration*. Foz do Iguassu, Brazil, August 28 - September 1, 2017.
- **Cowden C**. Wetland specialist input into the Working for Wetlands rehabilitation planning cycle. 21st National Wetlands Indaba, Hoedspruit, Mpumalanga, October 25-28, 2016.
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