CURRICULUM VITAE ADIE (Adrienne) ERASMUS (nee' Daines)

M.Sc., Pr. Sci. Nat. (400078/96);

Registered Environmental Assessment Practitioner (EAP): 2019/604

Educational qualifications

B. Sc (Botany and Zoology): University of Port Elizabeth, 1987

B. Sc (Hons) (Botany): University of Port Elizabeth, 1989

M. Sc (Botany): University of Port Elizabeth, 1991

Registered (15 August 1996) as a Professional Natural Scientist (ecological and botanical scientist) with the South African Council for Natural Scientific Professions (Registration number: 400078/96).

Registered (7 February 2020) with the Environmental Assessment Practitioners Association of South Africa (EAPASA): Registered Environmental Assessment Practitioner (EAP) (Registration number: 2019/604).

Specialisation

Ecological surveys (including wetlands) and monitoring, vegetation-land use mapping, urban open space planning, coastal zone planning and management, coastal ecology. The co-ordination of the environmental impact assessment process, including public participation. The compilation of environmental reports and environmental impact assessment reports. Evaluation of environmental management programme reports and environmental impact assessment reports.

Total years of environmental experience

25 years

Professional Qualifications

- Courses attended as part of the Danced Training Programme in Environmental Management Governance:
 - Environmental Law (April 1997) Presented by Environmental Management Unit PU for CHE and Technikon Pretoria)
 - Environmental Impact Assessment (May 1997) Presented by Environmental Management Unit, PU for CHE and Technikon Pretoria).
 - Environmental Management (May 1997) Presented by Environmental Management Unit, PU for CHE and Technikon Pretoria,
 - EMS systems (11 14 August 1997) Presented by Environmental Management Unit, PU for CHE and Technikon Pretoria),
 - Environmental Management in Industry (15 19 September 1997) Presented by Environmental Management Unit, PU for CHE and Technikon Pretoria).
 - Environmental Standards and Guidelines.
 - Monitoring Systems and Equipment (18 21 May 1998) Presented by Environmental Management Unit, PU for CHE and Technikon Pretoria)
- Successfully completed the Environmental Auditing Course (23 27 March 1998) Presented by SENRIO (Centre for Regional Development), University of Potchefstroom.
- Diploma in Project Management, Damelin Management School, Witbank (29 July 1999).
- Merit Award for Top Student in Project Management, Damelin Management School, Witbank (1999).
- Diploma in Bookkeeping, Damelin Management School, Witbank (2 August 2000).

Employment History

- March 2016 present: Owner: AdiEnvironmental cc (previously Clean Stream Environmental Services: Coalfields cc). Please refer to the attached Company Profile for further details.
- July 1999 28 February 2016: Managing member: Clean Stream Environmental Services: Coalfields cc. Please see the attached Company Profile for further details.
- 1 September 1996 June 1999: Environmental Officer, Environmental Management (Impact Management), Department of Environmental Affairs and Tourism (Mpumalanga), Witbank.

- April 1994 November 1995: Environmental Officer, Wetland Conservation Programme, Department of Environmental Affairs and Tourism, Pretoria
- 1 May 1991 31 May 1993: Contract Researcher, National Botanical Institute, Kirstenbosch, Cape Town.
- ⊕ 1 January 31 December 1989: Temporary Research Assistant, Coastal Dunes Programme, Botany Department, University of Port Elizabeth, Port Elizabeth.

Professional Experience

Professional experience gained over the years includes the following:

- Conducting vegetation surveys (including wetlands) and producing vegetation-land use maps.
- Experience and training in coastal ecology and coastal zone planning and management.
- Experience in urban open space planning.
- The co-ordination and implementation of the regulations in terms of:
 - Section 21, 22 and 26 of the Environment Conservation Act, 1989 (Act 73 of 1989);
 - Environmental Impact Assessment (EIA) Regulations, 2006;
 - Environmental Impact Assessment (EIA) Regulations, 2010;
 - Environmental Impact Assessment (EIA) Regulations, 2014;
 - Environmental Impact Assessment (EIA) Regulations, 2014 (as amended);
 - Minerals Act, 1991;
 - Mineral and Petroleum Resources Development Act, 2002;
- · Compilation and review of:
 - Basic Assessment Reports;
 - Scoping and Environmental Impact Assessment Reports;
 - Environmental Management Plans (EMP/EMPR);
 - Section 24G applications;
 - Exemption applications.
- Commissioning and management of specialist studies as part of the Basic Assessment or Environmental Impact Assessment (e.g. ecological (plant and animal life); wetland; soil/geotechnical; aquatic; surface water; traffic; air quality; noise, heritage, etc.).
- Coordination and facilitation of public participation (including public meetings) in terms of the above-mentioned legislation;
- Co-ordination and facilitation of Environmental Forums for mining companies on a quarterly basis;
- Conducting Environmental Compliance Assessments/Audits;
- Carrying out the functions of an Environmental Control Officer (ECO) on construction sites;
- Compiling Water Use License Applications (WULA) in terms of the National Water Act, 1998;
- Compiling Waste Management Licenses in terms of the National Environmental Management:
 Waste Act:
- Compiling Prospecting & Mining applications in terms of the Minerals Act, 1991 and the Mineral and Petroleum Resources Development Act, 2002;
- Compiling performance assessment reports as required in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002);
- · Independent Environmental Reporting.

Projects have been undertaken in Mpumalanga, Limpopo Province, Gauteng, North-West, KwaZulu-Natal and the Eastern Cape.

For the past 20 years as environmental consultant I have worked closely with other professionals (e.g. town planners, engineers, etc.) on project teams and provided input on a regular basis in order to ensure the best outcome of a project from an environmental point of view.

Training and mentorship

I have mentored and trained a number of persons (R. Janse van Rensburg, J. van Driel, L. Richards – see attached project list) with regards to conducting Environmental Impact Assessments.

Ms. Riana van Rensburg, who has worked for the company for more than 18 years, received her Masters in Environmental Management from the University of Free State in 2012. I acted as her mentor during the said studies.

During 2017, I participated in the IAIAsa Student Mentorship Programme and acted as mentor to Annemie du Randt.

Research projects:

Daines, A. 1993. Cape Metropolitan Area: West Coast Environmental Survey. Prepared for the Regional Planning Department, Western Cape Regional Services Council.

Daines, A., J. Adams and G. C, Bate. 1992. Vegetation of the Cape St. Francis bypass dunefield. Institute for Coastal Research Report no. 27.

Daines, A. 1991. The status of barrier dunes along the Eastern Cape coastline, South Africa. M.Sc Thesis. University of Port Elizabeth.

Environmental Reports Compiled:

Please refer to the attached list of projects for further information regarding projects compiled from 1999 until 2019.

International experience:

Member of the South African Mbeki-Gore Binational Commission delegation: Mining Study Tour to the USA (13 August – 5 September 1998).

Professional Society Affiliations:

South African Council for Natural Scientific Professions (SACNASP)

Societies:

Member of IAIA(SA) – Mpumalanga Branch Mpumalanga Wetland Forum: Secretary – 2015, 2016, 2017 Friends of the Witbank Nature Reserve – Committee member

Contact details:

Adie Erasmus M.Sc., Pr. Sci. Nat. (400078/96); Registered Environmental Assessment Practitioner (EAP): 2019/604

> Ad 🖣 Env(ronmental

AdiEnvironmental cc PO Box 647 Witbank (eMalahleni Central) 1035 Tel: 013 - 6975021

Cell: 083 271 8260
Email: adie@adienvironmental.co.za
Website: www.adienvironmental.co.za

CURRICULUM VITAE RIANA JANSE VAN RENSBURG

Educational qualifications

N. Dip (Nature Conservation): Technicon Pretoria, 1997 Masters in Environmental Management: University of the Free State, 2012

Registered (25 February 2020) with the Environmental Assessment Practitioners Association of South Africa (EAPASA): Registered Environmental Assessment Practitioner (EAP) (Registration number: 2019/1341).

Professional Qualifications

- Environmental Impact Assessment Course presented by CEM (Centre for Environmental Management), North-West University, Potchefstroom.
- Wetland Training Course presented by the University of Pretoria.
- Certificate: Project Management for Environmental Management Systems, University of the Free State
- Certificate: Basic GIS, University of the Free State
- Certificate: Excel 2010, Options in Training
- NOSA: Basic Fire Awareness, First Aid Level 1, Introduction to OHS Act, SHE Representative.
 - Courses attended at Damelin: A+ (PC Technology); N+ (Network Technology); Basic Bookkeeping.

Total years of environmental experience - 18 years

Employment History

- December 1996 December 1997: In service training at the Hoedspruit Cheetah Project/Kapama Game Reserve as part of the National Diploma: Nature Conservation.
- January 1998 April 2000: Tourguide, Shop Assistant and Assistant Manager: Hoedspruit Cheetah Project; regularly assisted with Game Ranger duties at Kapama Game Reserve.
- April 2001 present: Environmental Scientist: Clean Stream Environmental Services: Coalfields (now AdiEnvironmental cc).

Professional Experience

- The co-ordination and implementation of the Environmental Impact Assessment Regulations.
- The compilation of the following documentation: basic assessment reports, scoping reports, plan of study for environmental impact assessments, environmental impact assessment reports and environmental management plans.
- Overall project management (including client/government liaison) with regards to the compilation of environmental impact assessments (i.e. basic assessments, scoping, environmental impact assessment, environmental management plans, authorisations).
- The compilation of Section 24G applications (i.e. rectification of illegally commenced with activities).
- Facilitating and managing public participation as required in terms of the Environmental Impact Assessment Regulations, 2014 (as amended), the Mineral and Petroleum Resources Development Act and the National Water Act.
- Water Use Licenses.

Projects

Please find attached a list of projects (supervised by Mrs. A. Erasmus *Pr. Sci. Nat.*) that I have been involved in to date.

Contact details:

Riana Janse van Rensburg AdiEnvironmental cc P.O. Box 647, Witbank, 1035

Tel: 013-697 5021 E-mail: riana@adienvironmental.co.za

ADIENVIRONMENTAL CC (previously Clean Stream Environmental Services: Coalfields cc) LIST OF PROJECTS, 2008 - 2020

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2006: BASIC ASSESSMENT REPORTS

2008. Basic Assessment Report: Upgrading of an outfall sewer (phase 2) adjacent to the Merriespruit, Middelburg. Report prepared for: Steve Tshwete Local Municipality. Report dated: January 2008. Report number: BA 2007/13. (Authors: R. van Rensburg and A. Erasmus)

2008. Basic Assessment Report: The development of a residential and light industrial area (to be known as Die Heuwel X 13) on a part of Portion 47 of the farm Zeekoewater 311 JS, Emalahleni. Report prepared for: Fine Assets Investments 69 (Pty) Ltd. Report dated: March 2008. Report number: BA 2007/16. (Authors: R. van Rensburg and A. Erasmus)

2008. Basic Assessment Report: The development of a residential and light industrial area on a part of Portion 47 of the farm Zeekoewater 311 JS, Emalahleni. Report prepared for: Four Arrows Investments 294 (Pty) Ltd. Report dated: March 2008. Report number: BA 2007/18. (Authors: R. van Rensburg and A. Erasmus)

2008. Basic Assessment Report: The installation of an aboveground diesel tank (4th tank) at an existing diesel depot located on the Remaining Extent of Portion 21 of the farm Kromdraai 12 HS, Standerton. Report prepared for: Quantum Energy cc. Report number: BA 2007/24. (Authors: R. van Rensburg and A. Erasmus)

2008. Basic Assessment Report: Construction and operation of a permanent diesel and lube facility at Inyanda Coal Mine, Emalahleni. Report prepared for: Exxaro Coal (Pty) Ltd. – Inyanda Coal Mine. Report number: BA 2008/4. (Authors: R. van Rensburg and A. Erasmus).

2009. Basic Assessment Report: The installation of a 315mm diameter water pipeline and 200mm diameter sewer line from Duvha Park X2 to the proposed Benicon Park light industrial development, Emalahleni. Report prepared for: N.J. van der Merwe. Report number: BA 2009/1. (Authors: R. van Rensburg and A. Erasmus)

2009. Basic Assessment Report: The construction and operation of a sewage package plant at the Waterpan 2 Seam Access West Shaft, Witbank. Report prepared for: Xstrata Coal South Africa (Tweefontein Complex). Report number: BA 2009/3 (Authors: A. Erasmus and L. Richards).

2011. Basic Assessment Report: Proposed business/commercial development on the Remaining Extent of Portion 3 of the farm Grasfontein 199 IS, Hendrina. Report prepared for: Grasfontein Boerdery. Report number: BA 2011/02. (Authors: R. van Rensburg and A. Erasmus)

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2006: SCOPING REPORTS & ENVIRONMENTAL IMPACT ASSESSMENT REPORTS

2007. Scoping Report: The development of a Residential - cum - Equestrian Estate on Portion 146 Kromdraai 292 JS, Witbank. Report prepared for: Mr. J.J. Groenewald and Mrs. H.C Groenewald. Report dated: February 2008. Report number: EIA 2007/2. (Authors: L. Richards and A. Erasmus)

2008. Scoping and Environmental Impact Report: The development of a light industrial area on various Portions of the farm Naauwpoort 335 JS, Witbank. Report prepared for: Mr. N.J. van der Merwe. Report number: EIA 2006/6. (Authors: R. van Rensburg and A. Erasmus)

2009. Scoping Report and Environmental Impact Report: The development of a residential area on Portions 58, 59 and 62 of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Quickstep 419 (Pty) Ltd. Report number: EIA 2008/1. (Authors: R. van Rensburg and A. Erasmus)

2009. Scoping Report and Environmental Impact Report: The development of a residential area on Portions 63 and 64 of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Middelbro Property Company (Pty) Ltd. Report number: EIA 2008/2. (Authors: R. van Rensburg and A. Erasmus)

2009. Scoping and Environmental Impact Report: The construction and operation of a solid waste disposal facility on the Remaining Extent of Portion 1 and Portion 18 of the farm Wildebeestfontein 327 JS, Phola. Report prepared for: Emalahleni Local Municipality. Report number EIA 2002/10.(Authors: R. van Rensburg and A. Erasmus)

2009. Scoping Report. The development of a residential area on a portion of the Remainder of Portion 134 and a portion of Portion 112 of the farm Nooitgedacht 300 JS, Emalahleni. Report prepared for: Emalahleni Local Municipality. (Authors: R. van Rensburg and A. Erasmus)

2009. Scoping Report and Environmental Impact Report: The construction and operation of a filling station and associated infrastructure on the Remaining Extent of Portion 4 of the farm Winkelhaak 135 IS, Kinross. Report prepared for: 8 Mile Investments 126 (Pty) Ltd. Report number: EIA 2007/5. (Authors: R. van Rensburg and A. Erasmus)

2009. Scoping and Environmental Impact Report: The construction and operation of a private rail siding, coal handling facility and associated infrastructure on Portion 28 and Portion 29 of the farm Heuvelfontein 215 IR, Kendal. Report prepared for: Shanduka Coal (Pty) Ltd. Report number: EIA 2007/8. (Authors: R. van Rensburg and A. Erasmus)

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2010: BASIC ASSESSMENT REPORTS

- 2010. Basic Assessment Report: The construction and operation of a diesel depot on Stand 194, Extension 1, Hectorspruit. Report prepared for: Mohwelere Trading (Pty) Ltd. Report number: BA 2009/06. (Authors: R. van Rensburg and A. Erasmus)
- 2010. Basic Assessment Report: Proposed township establishment (businesses) on Portion 234 of the farm Zeekoewater 311 JS, eMalahleni. Report prepared for: Horatia Investments 8. Report number: BA 2010/5. (Authors: R. van Rensburg and A. Erasmus)
- 2011. Basic Assessment Report: The establishment of a light industrial area on a portion of Portion 44 and a portion of the Remaining Extent of Portion 22 of Klipfontein 322 JS, as well as Erf 4490, Witbank X41, eMalahleni. Report prepared for: Zambli 9 (Pty) Ltd. Report number: BA 2010/06. (Author: A. Erasmus)
- 2011. Basic Assessment Report: The construction and operation of new chicken batteries on a portion of the farm Kopermyn 435 JS, Middelburg. Report prepared for: Alzu Enterprises (Pty) Ltd. Report number: BA 2010/07. (Authors: R. van Rensburg and A. Erasmus)
- 2012. Basic Assessment Report: The construction and operation of a sewage modular plant on Stand 11112 (originally indicated as Stand 11109) of Middelburg X34, Middelburg. Report prepared for: Cross Point Trading 36 (Pty) Ltd. Report number: BA 2010/09. (Authors: R. van Rensburg and A. Erasmus)
- 2012. Basic Assessment Report: The installation of a 400 mm diameter water pipeline for the new Rockdale residential area, Middelburg. Report prepared for: Steve Tshwete Local Municipality. Report number: BA 2011/03. (Authors: R. van Rensburg and A. Erasmus)
- 2012. Basic Assessment Report: The utilization of Public Open Space (Erf 409, Tasbet Park, eMalahleni) for business purposes. Report prepared for: Roossenekal Foods (Pty) Ltd. Report number: BA 2012/01. (Authors: R. van Rensburg and A. Erasmus)
- 2012. Basic Assessment Report: The establishment of a residential area and smallholdings on Portion 93 of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Middelburg Muslim Jamaat. Report number: BA 2011/04. (Authors: R. van Rensburg and A. Erasmus)
- 2012. Basic Assessment Report: The utilization of Public Open Space (Erf 6386, Middelburg X22, Middelburg) for residential purposes. Report prepared for: Inframax Developments. Report number: BA 2012/02. (Authors: R. van Rensburg and A. Erasmus)
- 2013. Basic Assessment Report: The excavation of Pan 1 for mining purposes, Mafube Colliery, Middelburg. Report prepared for: Mafube Coal Mining (Pty) Ltd. Report number: BA 2013/01. (Authors: R. van Rensburg and A. Erasmus)
- 2013. Basic Assessment Report: The upgrading of the existing raw water abstraction facility within the Lusushwana River and the construction and refurbishment of associated infrastructure as part of the Lusushwana Bulk Water Supply Scheme. Report prepared for: Gert Sibande District Municipality. Report number: BA 2012/03. Report dated: September 2013. (Authors: R. van Rensburg and A. Erasmus)
- 2014. Basic Assessment Report: The construction and operation of chicken houses (layer hens) on the farms Kopermyn 435 JS and Kwaggafontein 460 JS, Middelburg. Report prepared for: Alzu Enterprises (Pty) Ltd. Report number: BA 2014/02. Report dated: June 2015. (Authors: R. van Rensburg and A. Erasmus)
- 2014. Basic Assessment Report: The development of a light industrial area (Benicon Park X1) and filling station on a portion of the Remaining Extent of Portion 26 of the farm Naauwpoort 335 JS, eMalahleni. Report prepared for: Elmir Industrial Projects cc. Report number: BA 2013/03. Report dated: 13 March 2014. (Authors: R. van Rensburg and A. Erasmus)
- 2014. Basic Assessment Report: The development of a transport facility on a portion of Portion 33 of the farm Vaalbank 289 JS, Middelburg. Report prepared for: Pieter Visser Trust. Report number: BA 2013/02. Report dated: June 2014. (Authors: R. van Rensburg and A. Erasmus)

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2010: SCOPING REPORTS & ENVIRONMENTAL IMPACT ASSESSMENT REPORTS

- 2010. Scoping Report, Environmental Impact Report and Environmental Management Plan: The construction and operation of an Asphalt Plant and associated infrastructure on Erf 75, Ferrobank X1, eMalahleni. Report prepared for: Sechaba Asphalt (Pty) Ltd. Report number: EIA 2009/4. (Authors: R. van Rensburg and A. Erasmus)
- 2013. Scoping Report and Environmental Impact Assessment: The establishment of a rural village on the Remaining Extent of the farm Toevlugt 320 JS, Middelburg. Report prepared for: Botshabelo Community Development Trust. Report number: EIA 2011/01. (Authors: R. van Rensburg and A. Erasmus)

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 & 2014 (as amended): BASIC ASSESSMENT REPORTS

2015. Basic Assessment Report: The development of a residential area (to be known as Chantelle X47) on the Remainder of Portion 119 of the farm Hartebeesthoek 303 JR, Pretoria. Report prepared for: Jumbo Building (Pty) Ltd. Report number: BA 2014/01. Report dated: February 2015. (Authors: R. van Rensburg and A. Erasmus)

- 2015. Basic Assessment Report: The upgrading of the Rimer's Water Treatment (purification) Works, Barberton. Report prepared for: Umjindi Local Municipality. Report number: BA 2015/01. Report dated: June 2015. (Author: A. Erasmus)
- 2015. Basic Assessment Report: The development of a new school site for Middelburg Preparatory School on Portion 362 (a portion of Portion 27) of the farm Middelburg Town and Townlands 287 JS, Middelburg. Report prepared for: Middelburg Preparatory School. Report number: BA 2015/03. Report dated: August 2015. (Author: A. Erasmus)
- 2015. Basic Assessment Report: The construction and operation of a breeder sow unit and associated infrastructure on Portion 19 of the farm Grootlaagte 449 JS, Middelburg. Report prepared for: Alzu Enterprises (Pty) Ltd. Report number: BA 2015/02. Report dated: October 2015. (Authors: R. van Rensburg and A. Erasmus)
- 2015. Basic Assessment Report: The development of a lintel supplier business on the Remaining Extent of Portion 76 Kromdraai 292 JS, eMalahleni. Report prepared for: Lintel Suppliers cc. Report number: BA 2015/04. Report dated: November 2015. (Authors: R. van Rensburg and A. Erasmus)
- 2016. Basic Assessment Report: The utilization of a portion of the Remaining Extent of Portion 24 of the farm Wonderfontein 428 JS for commercial purposes. Report prepared for: Real Time Investments 515 cc. Report number: BA 2015/05. Report dated: April 2016. (Authors: R. van Rensburg and A. Erasmus)
- 2017. Basic Assessment Report: The Construction and Operation of a Piggery on a Portion of Portion 7 of the Farm Erfdeel 446 JS, Middelburg. Report prepared for: Ede Farming (Pty) Ltd. Report number: BA 2016/02. Report dated: January 2017. (Authors: R. van Rensburg and A. Erasmus)
- 2017. Basic Assessment Report: Proposed commercial development on a portion of Portion 55 of the farm Blesboklaagte 296 JS, eMalahleni. Report prepared for: Jumbo van der Merwe Trust. Report number: BA 2016/01. Report dated: October 2017. (Authors: R. van Rensburg and A. Erasmus)
- 2017. Basic Assessment Report: The construction and operation of a pig Gene Transfer Station (GTC) on the Remaining Extent of Portion 24 of the farm Kleinfontein 432 JS, Middelburg. Alzu Enterprises (Pty) Ltd. Report number: BA 2017/03. Report dated: October 2017. (Authors: R. van Rensburg and A. Erasmus).
- 2018. Basic Assessment Report: Proposed Filling Station and Associated Infrastructure on Portion 1 of Erf 10769, Middelburg X26, Middelburg. Report prepared for: Pearls Star Investments 85 cc. Report number: BA 2017/04. Report dated: February 2018. (Authors: R. van Rensburg and A. Erasmus)
- 2018. Basic Assessment Report: The construction of a school and associated water pipeline on the Remainder of Generaalsdraai 429 JS and the Remainder of Portion 16 of Generaalsdraai 423 JS, Wonderfontein. Report prepared for: Umsimbithi Mining (Pty) Ltd. Report number: BA 2017/01. Report dated: June 2018. (Authors: R. van Rensburg and A. Erasmus)
- 2018. Basic Assessment Report: The development of a residential area on a portion of Portion 93 of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Middelburg Muslim Jamaat. Report number: BA 2018/01. Report dated: June 2019. (Authors: R. van Rensburg and A. Erasmus)
- 2020: Basic Assessment Report: Proposed upgrading of the existing piggery on the Remaining Extent of the farm Platkoppie 420 IR, Heidelberg, Gauteng. Report prepared for: Alzu Pig Genetics (Pty) Ltd. Report number: BA 2017/02. Report dated: July 2020 (Author: A Erasmus).
- 2020: Basic Assessment Report: The development of a neighbourhood shopping centre on Erf 1051 (zoned Public Open Space), Rockdale, Middelburg. Report prepared for: Chestar Supplies (Pty) Ltd. Report number: BA 2020/02. Report dated: September 2020. (Authors: R. van Rensburg and A. Erasmus).

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 & 2014 (as amended): SCOPING REPORT, EIA REPORT, EMPr

- 2015. Environmental Impact Report and EMP: The development of a residential area on Portion 52 of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Ivy Jewel 35 (Pty) Ltd. Report number: EIA 2014/01. Report dated: November 2015. (Author: A. Erasmus)
- 2016. Environmental Impact Report and EMP: The development of the Klarinet Integrated Housing Project Phase 2 and associated infrastructure, eMalahleni. Report prepared for: Absa Development Company Holding (Pty) Ltd. Report number: EIA 2014/02. Report dated: January 2016. (Author: A. Erasmus)
- 2016. Environmental Impact Report and EMP: The installation of a bulk sewer line from Pine Ridge Pump Station to the Klipspruit Sewage Treatment Works, eMalahleni. Report prepared for: eMalahleni Local Municipality. Report number: EIA 2016/01. Report dated: November 2016. (Authors: R. van Rensburg and A. Erasmus)
- 2017. Environmental Impact Report and EMP: Construction of a new dam and associated infrastructure as part of the upgrading of the bulk water supply scheme to Amsterdam, Mpumalanga. Report prepared for: Gert Sibande District Municipality. Report number: EIA 2017/01. Report dated: December 2017. (Author: A. Erasmus)
- 2018. Environmental Impact Report and EMPr: The development of a residential area on the Remaining Extent of the farm Rockdale 442 JS, Middelburg. Report prepared for: Rockdale Industrial (Pty) Ltd. Report number: EIA 2017/02. Report dated: April 2018. (Author: A. Erasmus)

2019. Environmental Impact Report and EMPr: Development of a rural village on a portion of Portion 5 of the farm Vlakvarkfontein 213 IR and a portion of the Remaining Extent of Van Dyksput 214 IR, Delmas. Report prepared for: Victor Khanye Local Municipality. Report number: EIA2018/01. Report dated: August 2019.

EXEMPTION REPORTS

2008. Application for Exemption in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998, (as amended) and the Environmental Impact Assessment Regulations, 2006: The construction of a bridge across the Olifants River, Presidentsrus, Middelburg. Report prepared for: Steve Tshwete Local Municipality. Report number: BA 2008/5. (Authors: R. van Rensburg and A. Erasmus)

2016. Exemption Report: The utilization of a portion of Stand 505 (zoned as Public Open space), Molteno Street, Nasaret, for the construction of a church. Report prepared for: The Body of Jesus Christ Church. Report number: EX 2016/01. Report dated: May 2016. (Authors: R. van Rensburg and A. Erasmus)

2018. Exemption Report: The utilization of the Remainder of Erf 2427 (zoned as Park), Phola, for the construction of a retirement home. Report prepared for: Eskom - Generation Division (Kendal Power Station). Report number: EX2018/01. Report dated: March 2018. (Authors: R. van Rensburg and A. Erasmus)

SECTION 24 G APPLICATIONS

2008. Section 24G Application: Diesel depot – third tank: Remaining Extent of Portion 21 of the farm Kromdraai 12 HS, Standerton. Report prepared for: Quantum Energy cc. Report number: 18/3/7 GS-03 (Authors: R. van Rensburg and A. Erasmus)

2008. Section 24G Application: Temporary aboveground diesel tanks located at Inyanda Coal Mine, eMalahleni. Report prepared for: Exxaro Coal (Pty) Ltd. Report number: BA 2008/2). (Authors: R. van Rensburg and A. Erasmus)

2010. Section 24G Application: Existing aboveground diesel tanks located on the Remainder of the farm Van Stadensdam 344 IS, Charl Cilliers. Report prepared for: Vermaas Brandstof BK. Report number: BA 2010/4. (Authors: R. van Rensburg and A. Erasmus)

2011. Section 24G Application and Environmental Management Plan: The construction and operation of a briquetting plant at Mafube Colliery, Middelburg. Report prepared for: Mafube Coal Mining (Pty) Ltd. Report number: EIA 2011/02. (Author: A. Erasmus)

2012. Section 24G Application and Environmental Management Plan: Lodge and associated infrastructure development on Portion 131 of the farm Kromdraai 292 JS, eMalahleni. Report prepared for: J.L. Janse van Rensburg. Report number: S24G 2012/01. (Author: A. Erasmus and R. van Rensburg)

2012. Section 24G Application, Environmental Management Plan and Public Participation Report: The trenching of a pan within Mafube Colliery, Middelburg. Report prepared for: Mafube Coal Mining (Pty) Ltd. Report number: S24G2012/02. (Author: A. Erasmus and R. van Rensburg)

2013. Section 24G Application: The formalization of an existing residential area on a portion of the Remainder of Portion 134 and a portion of Portion 112 of the farm Nooitgedacht 300 JS, eMalahleni. Report prepared for: Emalahleni Local Municipality. (Authors: R. van Rensburg and A. Erasmus)

2014. Section 24G Application, Environmental Management Plan and Public Participation Report: The formalization of an existing residential area on a portion of the Remainder of Portion 134 and a portion of Portion 112 of the farm Nooitgedacht 300 JS, eMalahleni. Report prepared for: Emalahleni Local Municipality. Report number: S24G 2013/01. (Authors: R. van Rensburg and A. Erasmus)

2014. Section 24G Application, Environmental Management Plan and Public Participation Report: The utilization of Portion 54 of the farm Rondebosch 403 JS (Middelburg) for light industrial activities. Report prepared for: Off-road Racing Middelburg cc. Report number: S24G 2014/01. (Authors: R. van Rensburg and A. Erasmus)

SCOPING REPORTS IN TERMS OF THE MPRDA

2009. Scoping Report: Proposed new Xstrata Coal Mine on various portions of the farm Elandspruit 291 JS, Middelburg. Report prepared for: Xstrata Coal (Pty) Ltd. Report number: EMPR 2009/2. (Author: A. Erasmus)

2009. Scoping Report: Proposed new Xstrata Coal Mine on the farms Gemsbokfontein 411 JS, Patattafontein 412 JS, Zonnebloem 396 JS and Panplaats 395 JS, Middelburg. Report prepared for: Xstrata Coal (Pty) Ltd. Report number: EMPR 2009/1. (Author: A. Erasmus)

2009. Scoping Report: Proposed Hartbeesfontein Colliery on various portions of the farm Haartbeestfontein 239 IS, Ermelo. Report prepared for: Northern Coal (Pty) Ltd. Report dated: 30 November 2009. Report number: EMPR 2009/3. (Authors: A. Erasmus and J. Erasmus)

2014. Scoping Report: The extension of Belfast Silica Mine located on the Remaining Extent of Portion 1 of the farm Klipfontein 385 JS, Belfast. Report prepared for: Belfast Silica Mine (Pty) Ltd. Report number: EMP 2014/01. Report dated: July 2014. (Author: A. Erasmus)

EIA REPORTS & EMPR'S IN TERMS OF THE MPRDA

2010. Environmental Management Programme (EMP): Proposed Northern Coal Mine on various portions of the farm Haartbeesfontein 239 IS, Ermelo. Report prepared for: Northern Coal (Pty) Ltd. Report dated: April 2010. Report number: EMPR 2009/3. (Authors: A. Erasmus and J. Erasmus)

2011. Revised Environmental Management Plan (EMP) for Belfast Silica Mine (Pty) Ltd. located on the Remaining Extent of Portion 1 of the farm Klipfontein 385 JS, Belfast. Report prepared for: Belfast Silica Mine (Pty) Ltd. Report number: EMPR 2011/01. (Author: A. Erasmus)

2014. EIA and EMP: The extension of Belfast Silica Mine located on the Remaining Extent of Portion 1 of the farm Klipfontein 385 JS, Belfast. Report prepared for: Belfast Silica Mine (Pty) Ltd. Report number: EMP 2014/01. Report dated: July 2015. (Author: A. Erasmus)

PROSPECTING APPLICATIONS IN TERMS OF THE MPRDA

2011. Environmental Management Plan (EMP): Application for a prospecting right with regards to Portions 32, 116, 119 & 144 of the farm Kromdraai 292 JS, eMalahleni. Report prepared for: Botlalo Mining and Energy Resources (Pty) Ltd. Report number: 2011/PR1. (Author: A. Erasmus)

2014. Public Participation Report and Environmental Management Plan submitted in terms of Section 39 and Regulation 52 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (the Act). Prospecting right application on various Portions of the farm Blesboklaagte 296 JS, eMalahleni. Report prepared for: Anglo American Coal, a Division of Anglo Operations (Pty) Ltd. Report dated: 21 May 2014. Report number: EMPR 2014/01 (Author: A. Erasmus)

ENVIRONMENTAL AUDIT REPORTS

2011. Environmental Audit: Activities on Portion 26 of the farm Blesboklaagte 296 JS, eMalahleni. Report prepared for: Absa DevCo. Report dated: June 2011. Report number: AUDIT 2011/1 (Author: A. Erasmus)

2014. Environmental Audit: Activities on Portion 26 of the farm Blesboklaagte 296 JS, eMalahleni. Report prepared for: Absa DevCo. Report dated: September 2014. Report number: AUDIT 2014/01 (Author: A. Erasmus)

2011. Environmental legal compliance audit for Mafube Colliery. Report prepared for: Mafube Colliery. Report dated: February 2011. Report number: AUD 2010/1 (Author: A. Erasmus)

2019/2020: Environmental compliance reports 1 to 13: The construction of a piggery on a portion of Portion 7 of the farm Erfdeel 446 JS, Middelburg. Reports prepared for EDE Farming (Pty) Ltd. (Authors: A Erasmus and R. van Rensburg).

AEL APPLICATION

2011. Application form in respect of the atmospheric pollution prevention act, 1965: The construction and operation of an asphalt plant and associated infrastructure on Erf 75, Ferrobank X1, eMalahleni. Report prepared for: Sechaba Asphalt (Pty) Ltd. (Authors: A. Erasmus and R. van Rensburg)

WATER USE LICENCE APPLICATION

2014. Water use licence application 21 (c) and (i): Proposed river crossing, Blesbokspruit, Klarinet X8, eMalahleni. Report prepared for: Emalahleni Local Municipality. Report number: WUL2014/01. Report dated: October 2014. (Author: A. Erasmus)

2013. 2013. Facilitation of a Water Use Licence Application process for Portion 93 of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Middelburg Muslim Jamaat. Report prepared by Ilonka Haylett (BTW & Associates (Pty) Ltd.). Report dated: April 2013. Report number: 20336-REP-001.

2014. Facilitation of a Water Use Licence Application process for the Lusushwana Bulk Water Supply Scheme. Report prepared for: Gert Sibande District Municipality. Report prepared by: Ilonka Haylett (BTW & Associates (Pty) Ltd.). Report dated: January 2014. Report number: 20350-REP-001.

2018: Water Use License Application: The development of a pig Gene Transfer Centre on the Remaining Extent of Portion 24 of Kleinfontein 432 JS, Middelburg. Report dated: October 2019. Prepared for: Alzu Pig Genetics (Pty) Ltd. (Authors: R. van Rensburg and A. Erasmus).

2020: Water Use License Application: Pproposed filling station and associated infrastructure on Portion 1 of Erf 10769, Middelburg x26, Middelburg. Prepared for: Pearl Star Investments 85 cc. (Author: A. Erasmus and R. van Rensburg).

WASTE LICENCE APPLICATION IN TERMS OF NEM: WASTE ACT, 2008

2013. Waste licence application: Waste licence application process for waste activities in terms of the National Environmental Management: Waste Act 2008 (No. 59 of 2008) – New Belfast Waste Site. Report dated: June 2013. Report prepared for: Emakhazeni Local Municipality. (Author: A. Erasmus)

DUE DILIGENCE REPORT

2014. Due Diligence - Somkele Anthracite Mine. Report prepared for: Badger Mining and Consulting. Report dated: February 2014.

ENVIRONMENTAL CONTROL OFFICER

2011-2014: Environmental Control Officer – Klarinet X6, X7 and X8 construction activities. A. Erasmus

ENVIRONMENTAL FORUMS

2007-2019: Arranging and facilitating the Inyanda Stakeholder Engagement Forum meeting (Inyanda Coal Mine) – 3 meetings per year.

ADIENVIRONMENTAL CC (previously Clean Stream Environmental Services: Coalfields cc) LIST OF PROJECTS, 1999 – 2007

SCOPING REPORTS

Environmental Scoping Report for the Trade Centre Development, Pretoria. Report dated: October 1999. Report prepared for: New Nation Development (Pty) Ltd. (Author: A. Erasmus)

Scoping Report: Remainder of Portion 2 of the Farm Botesdal 529 JQ, Randburg. Report dated: May 2000. Report prepared for: Tegan Props no. 1cc. Report Number: EIA 2000/1 (Author: A. Erasmus)

Scoping Report: Proposed maturation ponds, Ekangala. Report dated: June 2000. Report prepared for: Ekangala Local Council. Report number: EIA 2000/2 (Author: A. Erasmus)

Scoping Report: Remaining portion of Portion 101 of the farm Witbank 307 JS, Witbank. Report dated: September 2000. Report prepared for: Sherita's Property Investment cc. Report Number: EIA 2000/3 (Author: A. Erasmus)

Scoping Report: Proposed township establishment for Portion 150 of the farm Klipfontein 322 JS, Witbank. Report dated: October 2000. Report prepared for: Highveld Steel and Vanadium Corporation Ltd. Report Number: EIA 2000/4 (Author: A. Erasmus)

Scoping Report: Remaining portion of the farm Rietkuil 249 IR, Delmas. Report dated: October 2000. Report prepared for: Hannes Potgieter Trust Report Number: EIA 2000/5 (Author: A. Erasmus)

Scoping Report: The construction and operation of the proposed day visitor's camp at Skukuza, Kruger National Park. Report dated: December 2000. Report prepared for: South African National Parks. Report Number: EIA 2000/6 (Author: A. Erasmus)

Scoping Report: The construction and operation of the Albasini gate entrance and access road to the Kruger National Park. Report dated: January 2001. Report prepared for: South African National Parks. Report Number: EIA /JAN01 (Author: A. Erasmus)

Scoping Report: Proposed establishment of filling station on Portion 7 of Erf 1159, De Heuwel Extension 5, Witbank. Report dated: March 2001. Report prepared for: Mr. C. Gouws. Report Number: EIA2001/1 (Author: A. Erasmus)

Scoping Report: Upgrading of the Lower Sabie Camp, Kruger National Park. Report dated: May 2001. Report prepared for: South African National Parks. Report Number: EIA2001/2 (Author: A. Erasmus)

Scoping Report: Development Of a New Ranger's House And Staff Facilities In The Nwanetsi Area Of The Kruger National Park. Report Dated: July 2001. Report Prepared For: South African National Parks (SANParks). Report Number: (Author: A. Erasmus)

Scoping Report: Subdivision of and residential development on portion 44 of the farm Magathashek 270 JQ, located within the MPNE, Rustenburg. Report Dated: June 2001. Report Prepared For: Northwest Pipelines cc. Report Number: EIA 2001/3 (Author: A. Erasmus)

Scoping Report: The Upgrading Of The Hans Merensky Country Club, Phalaborwa. Report Dated: October 2001. Report Prepared For: Hans Merensky Country Club (Pty) Ltd. Report Number: EIA 2001/4 (Author: A. Erasmus)

Scoping Report: The Construction and Operation Of A Zip Slide In Close Proximity Of Sun City. Report Dated: January 2002. Report Prepared For: Unreal. Report Number: EIA 2002/1 (Author: A. Erasmus)

Scoping Report: Development of a Citrus Waste Composting Facility On A Portion Of The Farm Coulter 391 JU, Malelane. Report Dated: March 2002. Report Prepared For: Onderberg Processing (Pty) Ltd. Report Number: EIA 2002/2 (Author: A. Erasmus)

Scoping Report: The construction and operation of the proposed alumino-thermic FeV plant within the main steelworks site of Highveld Steel and Vanadium Corporation Limited, Witbank. Report dated: June 2002. Report prepared for: South Africa Japan Vanadium (Pty) Ltd. Report Number: EIA 2002/3 (Author: A. Erasmus)

Scoping Report: The township establishment of Klarinet Extention 5 and 6 on a portion of Portion 218 of the farm Blesboklaagte 296 JS, Witbank. Report dated: July 2002. Report prepared for: Emalahleni Local Municipal Council. Report Number: EIA2002/4 (Author: A. Erasmus)

Scoping Report: Proposed township establishment on a portion of Portion 18 and the Remainder of Portion 1 of the farm Wildebeestfontein 327 JS, Phola. Report dated: July 2002. Report prepared for: Emalahleni Local Municipal Council. Report Number: EIA 2002/5 (Author: A. Erasmus)

Scoping Report: Proposed graveyard to be located on a portion of the remaining extent of the farm Rietkuil 558 JS, Kriel. Report dated: July 2002. Report prepared for: Emalahleni Local Municipal Council. Report Number: EIA 2002/6 (Author: A. Erasmus)

Scoping Report: Proposed fire station to be located on a portion of the remainder of Portion 6 of the farm Grasfontein 199 IS, Hendrina. Report dated: September 2002. Report prepared for: Middelburg Local Municipality. Report Number: EIA 2002/7 (Author: R. van Rensburg and A. Erasmus)

Scoping Report: The construction and operation of the Palabora Mining Company Limited waste disposal site, Phalaborwa. Report dated: September 2002. Report prepared for: Palabora Mining Company Limited. Report Number: EIA 2002/8 (Author: A. Erasmus)

Scoping Report: Proposed residential and light industrial area to be located on a portion of the remaining extent of the farm Rietkuil 558 JS, Kriel. Report dated: October 2002. Report prepared for: Emalahleni Local Municipal Council. Report Number: EIA 2002/9 (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Scoping Report: Proposed township establishment on portion 66 of the farm Welverdiend 148 HT, Piet Retief. Report prepared for: Mkhondo Municiplity. Report dated: December 2002. Report number: EIA 2002/11. (Author: A. Erasmus and A. van Zyl)

Clean Stream Environmental Services. 2003. Scoping Report: Rezoning of Portion 37 of the farm Kromdraai 292 JS, Witbank for use as a private cemetery. Report prepared for: Mr. C.C. van Niekerk. Report dated: April 2003. Report number: EIA 2002/12. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: The upgrading of the existing sewage purification works, Phola. Report prepared for: Emalahleni Local Municipal Council. Report dated: May 2003. Report number: EIA 2003/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: The erection of a 22 kV powerline and associated substation from Witbank to Klarinet Extension 3, Witbank. Report prepared for: Emalahleni Local Municipal Council. Report dated: September 2003. Report number: EIA 2003/2. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: The realignment of portion of the roads P36-2, P101-1 and P131-1 and the construction of associated infrastructure in the vicinity of Leeuwpan Coal Mine, Delmas. Report prepared for: The Department of Public Works, Roads and Transport on behalf of Leeuwpan Coal Mine. Report dated: May 2003. Report number: EIA 2003/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: The construction and operation of the staff housing facilities at the Phabeni Gate Entrance, Kruger National Park. Report prepared for: South African National Parks. Report dated: July 2003. Report number: EIA 2003/4. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: Proposed township establishment (Klarinet Ext. 7) on Portion 104 of the farm Blesboklaagte 296 JS, Witbank. Report prepared for: Emalahleni Local Municipal Council. Report dated: August 2003. Report number: EIA 2003/5. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: The establishment of a township on Portion 28 of the farm Doornkop 246 JS, Middelburg. Report prepared for: Middelburg Local Municipality. Report dated: December 2003. Report number: EIA 2003/7. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2003. Scoping Report: The construction and operation of a service station and associated infrastructure on a portion of Portion 22 of the farm Witklip 232 IR, Delmas. Report prepared for: Mr. G. Diedericks. Report dated: December 2003. Report number: EIA 2003/8. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2004. Scoping Report: The upgrading of the Leeuwfontein Siding, Kendal. Report prepared for: Leeuwfontein Colliery (Pty) Ltd. Report dated: May 2004. Report number: EIA 2003/9. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2005. Scoping Report: The rezoning of Portions 121, 128 and 189 of the farm Zeekoewater 311 JS, Witbank, from agriculture to residential, light industrial and commercial. Report prepared for: Emalahleni Local Municipality. Report dated: February 2005. Report number: EIA 2004/1. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2005. Scoping Report: The development of the proposed Aloe Falls Country Estate on various portions of the farm Avontuur 725 JT, Badplaas. Report prepared for: Aloe Falls Golf Estate cc. Report dated: March 2005. Report number: EIA 2004/2. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2005. Scoping Report: The development of a golf estate within the boundaries of the existing Kranspoort Holiday Town, Loskop Dam. Report prepared for: Kranspoort Vakansiebelange Bpk. Report dated: February 2005. Report number: EIA 2004/3. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2004. Scoping Report: The development of a shopping complex and associated infrastructure on the remainder of portion 27, 287 JS of the farm Middelburg. Report prepared for: Mpisi Trading 96 (Pty) Ltd. Report dated: October 2004. Report number: EIA 2004/5. (Authors: A. Erasmus and J. van Driel)

Clean Stream Environmental Services. 2005. Scoping Report: The construction and operation of a Sintel Char plant within the boundries of Grootegeluc Coal Mine, Lephalale. Report prepared for: Kumba Resources Limited. Report dated: August 2005. Report number: EIA 2005/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The development of a shopping centre and associated infrastructure on a Portion of the Remainder of Portion 77 of the farm Driefontein 137 IS, Secunda. Report prepared for: Bunker Hills 693 (Pty) Ltd. Report dated: March 2006. Report number: EIA 2005/2. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Scoping Report: The rezoning of portion 271 (a portion of portion 270) Zeekoewater 311 JS, Witbank, from agriculture to special (commercial/business). Report prepared for: Elmir Projects. Report dated: August 2005. Report number: EIA 2005/3. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2005. Scoping Report: The rezoning of Portions 244, 257 and 274 of the farm Zeekoewater 311 JS, Witbank. Report prepared for: Bella Casa Development cc. Report dated: October 2005. Report number: EIA 2005/6. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007 Scoping Report: Proposed township establishment (Klarinet x8) on a Portion of Portion 153, 168 and 189 and Portions 124, 148, 158, 187, 190 & 210 of the Farm Blesboklaagte 296 JS, Witbank Report prepared for: Emalahleni Local Municipality. Report dated: July 2007. Report number: EIA 2005/7. (Author: A. Erasmus)

Clean Stream Environmental Services. 2005. Scoping Report: The construction and operation of a new solid waste disposal site on a Portion of the Farm Tweefontein 357 JT, Belfast. Report prepared for: Emakhazeni Local Municipality. Report dated: June 2006. Report number: EIA 2005/8. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The construction and operation of a filling station on a portion of portion 271 (a portion of portion 270) Zeekoewater 311 JS, Witbank. Report prepared for: Elmir Projects. Report dated: April 2006. Report number: EIA 2005/4. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The construction and operation of an overland conveyor and/or haul road from the proposed Stuart Coal East Mine to the existing Stuart Coal Weltevreden Colliery, Delmas. Report prepared for: Stuart Coal (Pty) Ltd. Report dated: February 2006. Report number: EIA 2005/5. (Authors: A. Erasmus and I. Aucamp)

Clean Stream Environmental Services. 2006. Scoping Report: The rezoning of the remaining Portion of Portion 19 (a Portion of Portion 1) of the farm Kromdraai 292 JS, Witbank, from agriculture to residential and possibly Business/Commercial. Report prepared for: The Business Zone 679cc. Report dated: November 2006. Report number: EIA 2006/1. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The rezoning of the Remainder of Portion 285 of the farm Zeekoewater 311 JS, Witbank, from agriculture to business and/or residential. Report prepared for: Spanish Ice Properites 21 (Pty) Ltd. Report dated: October 2006. Report number: EIA 2006/2. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The rezoning of Portion 136 of the farm Doornpoort 312 JS, Witbank, from agriculture to residential for the development of a Golf Estate. Report prepared for: Morning Tide Investments. Report dated: June 2006. Report number: EIA 2006/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The development of a Residential area on Portion 22 of the farm Naauwpoort 335 JS, Witbank. Report prepared for: Before the Wind Investment 113 (Pty) Ltd. Report dated: November 2006. Report number: EIA 2006/4. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The development of a Residential area on Portion of the farm Rondebosch 403 JS, Middelburg. Report prepared for: Sydom Investments (Pty) Ltd. Report dated: March 2006. Report number: EIA 2006/5. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Scoping Report: The development of a light industrial area on various portions of the farm Naauwpoort 335 JS, Witbank. Report prepared for: Mr. N.J. van der Merwe. Report dated: May 2007. Report number: EIA 2006/6. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Scoping Report: The development of a Residential area on Portion 10 of the farm Springboklaagte 416 JS, Middelburg District. Report prepared for: Steve Tshwete Local Municipality. Report dated: April 2007. Report number: EIA 2007/1. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Scoping Report: Proposed township establishment on the remaining extent of Portion 27 of Blesbokspruit 150 IS and the remaining extent of Portion 28 of Naudesfontein 261 IS, Bethal. Report prepared for: Silvertron 130 BK. Report dated: July 2007. Report number: EIA 2007/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2007. Scoping Report: The Construction and operation of a filling station and associated infrastructure on the remaining extent of Portion 4 of the Farm Winkelhaak 135 IS, Kinross. Report prepared for: 8 Mile Investments 126 (Pty) Ltd. Report dated: November 2007. Report number: EIA 2007/5. (Author: A. Erasmus)

EIA REPORTS

Clean Stream Environmental Services. 2005. EIA report: The development of the proposed Aloe Falls Country Estate on various Portions of the farm Avontuur 725 JT, Badplaas. Report prepared

for: Aloe Falls Golf Estate cc. Report dated: March 2006. Report number: EIA 2004/2. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Environmental Management Plan (EMP): The construction and operation of a Sintel Char Plant within the boundaries of Grootegeluk Coal Mine, Lephalale. Report prepared for: Kumba Resources Limited. Report dated: March 2006. Report number: 2005/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2007. EIR: The rezoning of Portion 136 of the farm Doornpoort 312 JS, Witbank, from agriculture to residential for the development of a Golf Estate. Report prepared for: Morning Tide Investments. Report dated: January 2007. Report number: EIA 2006/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2007. EIR: The development of a residential area on Portion 10 of the farm Springboklaagte 416 JS, Middelburg District. Report prepared for: Steve Tshwete Local Municipality. Report dated: August 2007. Report number: EIA 2007/1. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. EIA: Scoping Report: The development of a residential area on the remaining extent of the Farm Kriel 73 IS, Ga-Nala. Report prepared for: Fine Asset Investment 40 (Pty) Ltd. Report dated: November 2007. Report number: EIA 2007/6 (Authors: R. van Rensburg and A. Erasmus)

EXEMPTION REPORTS

Clean Stream Environmental Services. 2000. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Leeuwpan Coal Mine. Report prepared for: Leeuwpan Coal Mine. Report dated: 2000. Report number: EXE 2000/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2000. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Woestalleen Colliery. Report prepared for: Woestallen Colliery. Report dated: February 2000. Report number: EXE 2000/2. (Author: A. Erasmus)

Clean Stream Environmental Services. 2000. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Remaining section of the bulk connection sewer line, Ekangala. Report prepared for: Ekangala Local municipality. Report dated: June 2000. Report number: EXE 2000/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Background information with regards to the proposed Residential Development for the portion 1 of the farm Springvallei 321 JS, Witbank. Report prepared for: Springbok Valley Investments (Pty). Report dated: May 2002. Report number: EXE 2002/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Upgrading of the Moloto Road, Moloto, Kwamhlanga. Report prepared for: Thembisile Municipality. Report dated: June 2002. Report number: EXE 2002/2. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Proposed Township Establishment on the remainder of portion 15 of the farm Joubertrus 310 JS, Witbank: Water Purification Works. Report prepared for: Emalahleni Local Municipality Council. Report dated: July 2002. Report number: EXE 2002/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Proposed Township Establishment on the remainder of portion 15 of the farm Joubertrus 310 JS, Witbank: Commercial Development. Report prepared for: Emalahleni Local Municipality Council. Report dated: July 2002. Report number: EXE 2002/4. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Provision of a bulk water supply link from Moloto Extension 3, Kwamhlanga. Report prepared for: Thembisile Municipality. Report dated: June 2002. Report number: EXE 2002/5. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Proposed diesel and paraffin depot on the remainder of erf 272 IR, 26 Princes street, Standerton. Report prepared for: Quantum Energy (Pty) Ltd. Report dated: June 2002. Report number: EXE 2002/6. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of portion 91 of the farm Zeekoewater 311JS, witbank from agriculture to industrial 3. Report prepared for: Megamesh (Pty) Ltd. Report dated: October 2002. Report number: EXE 2002/7. (Author: A. Erasmus)

Clean Stream Environmental Services. 2002. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Exemption report with regards to the temporary storage of Hazardous waste at Phalaborwa Mining Company (Ltd). Report prepared for: Palaborwa Mining Company Ltd. Report dated: November 2002. Report number: EXE 2002/8. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Application for Exemption according to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of stand 27 (portion 1) of Dixon agriculture holdings, Witbank from agriculture. Report prepared for: FCR Services. Report dated: May 2003. Report number: EXE 2003/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The subdivision of portion 210 of the farm Naauwpoort 335 JS, Witbank. Report prepared for: Mr N.W. McKenzie. Report dated: October 2003. Report number: EXE 2003/2. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Proposed township establishment (Middelburg Ext 25) to be located on various portions of the farm Middelburg Town and Townlands 287 JS, Middelburg. Report prepared for: Quickstep 541. Report dated: October 2003. Report number: EXE 2003/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2003. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a water supply pipeline from the existing Kameelpoortnek Reservior to Klipfontein. Report prepared for: Thembesile Municipality. Report dated: November 2003. Report number: EXE 2003/4. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a road and bridge between Kerk Street and Pongola Avenue, Middelburg. Report prepared for: Steve Tshwete Municipality. Report dated: June 2004. Report number: EXE 2004/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a 600mm diameter outfall sewer as part of the Klein Olifants outfall sewer, Middelburg. Report prepared for: Middelburg Local Municipality. Report dated: February 2004. Report number: EXE 2004/2. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Rezoning of portion 236 of farm Zeekoewater 311 JS from agriculture to residential. Report prepared for: Reka Trade 1259. Report dated: April 2004. Report number: EXE 2004/3. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Electrification of the private siding at Leeuwpan Coal Mine. Report prepared for: Leeuwpan Coal Mine. Report dated: May 2004. Report number: EXE 2004/4. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of a Kendal Forest Holding smallholding from agriculture to light industrial, Kendal. Report prepared for: Cape Contracts (Pty) Ltd. Report dated: October 2004. Report number: EXE 2004/5. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of portion 10 and 12 of the farm, Klipfontein 322 JS, Witbank, from agriculture to residential and light industrial. Report prepared for: West Dunes Properties 6 (Pty) Ltd. Report dated: June 2004. Report number: EXE 2004/6. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Proposed composting operation on a portion of the farm Coulter 391 JU, Malelane. Report prepared for: Onderberg Processing. Report dated: July 2004/April 2005. Report number: EXE 2004/7. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of portion 118 of the farm Klipfontein 332 JS. From agriculture to residential, Witbank. Report prepared for: Bella Casa Developments cc. Report dated: October 2004. Report number: EXE 2004/8. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The establishment of a Township on the remainder of portion 4 of the farm Prinshof 2 IS, Phola. Report prepared for: Emalahleni Local Municipal Council. Report dated: October 2004. Report number: EXE 2004/9. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a bulk outfall sewerline from the RDP housing development to the existing sewer treatment plant (Vlaklaagte), Tweefontein. Report prepared for: Thembesile Local Municipality. Report dated: December 2004. Report number: EXE 2004/10. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2004. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a concrete reservoir on a Portion of the farm Geelbeksvley 684 KR, Lefiso. Report prepared for: Dr. J.S. Moroka Municipality. Report dated: December 2004. Report number: EXE 2004/11. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a outfall sewer of approximately 600 meters as part of the upgrading of the Klein Olifants outfall sewer (Phase 3), Middelburg. Report prepared for: Steve Tshwete Local Municipality. Report dated: February 2005. Report number: EXE 2005/1. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The erection of 11kV overhead power lines and associated infrastructure between the residential areas of Klarinet X3, X4, X5 and X6. Report prepared for: Emalahleni Local Municipality. Report dated: April 2005. Report number: EXE 2005/2. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of Portion 1 of the farm Spring Valley 321 JS (Witbank) from agriculture to residential. Report prepared for: Spring Valley Investments (Pty) Ltd. Report dated: April 2005. Report number: EXE 2005/3. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The formalization of the informal residential areas (known as TOITSKRAAL), located on the Remainder of Portion 12 and Portions 23, 26, 35, 34, 37, 38, 39 and 40 of the farm Valschfontein 33 JS, Siyabuswa. Report prepared for: Dr. J.S. Moroka Municipality. Report dated: July 2005. Report number: EXE 2005/4. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The formalisation of informal residential areas (known as MAGANAGOBUSWA), located on Portions 27, 28, 30, 32, 33, 36 and 48 of the farm Valschfontein 33 JS, Siyabuswa. Report prepared for: Dr. J.S. Moroka Municipality. Report dated: July 2005. Report number: EXE 2005/5. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Rezoning of Portion 62 of the farm Zeekoewater 311 JS, Witbank, from agriculture to business/commercial. Report prepared for: Dartingo Trading 0007 (Pty) Ltd. Report dated: November 2005. Report number: EXE 2005/6. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The proposed rezoning of Portion 84 of the farm Kromdraai 292 JS, Witbank, from agriculture to special. Report prepared for: Angel Fish Investment cc. Report dated: November 2005. Report number: EXE 2005/7. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The proposed rezoning of Erf 2465 Aerorand, Middelburg, from Public Open Space to residential. Report prepared for: Corpus Christi. Report dated: September 2005. Report number: EXE 2005/8. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of an outfall sewer as part of the upgrading of the Klein Olifants outfall sewer (Phase 4), Middelburg. Report prepared for: Steve Tshwete Local Municipality. Report dated: November 2005. Report number: EXE 2005/9. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2005. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The proposed rezoning of Erf 2543, Golfsig Extension 8, Middelburg, from Public Open Space to General Residential 2. Report prepared for: Clatco Property Investments. Report dated: December 2005. Report number: EXE 2005/10. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of three (3) footbridges across the Ngodini River, Ngodini. Report prepared for: Mbombela Local Municipality. Report dated: March 2006. Report number: EXE 2005/11. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of the remaining extent of Portion 63 (a portion of Portion 15) and the remaining extent of Portion 15 of the farm Zeekoewater 311 JS, Witbank, from agriculture to special. Report prepared for: New Heights 176 (Pty) Ltd. Report dated: February 2006. Report number: EXE 2005/12. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a footbridge across a tributary of the Nsikazi River, Phola. Report prepared for: Mbombela Local Municipality. Report dated: March 2006. Report number: EXE 2005/13. (Authors: R. van Rensburg and A. Erasmus

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The upgrading of the Ermelo Southern Water Treatment Works (from 2.5Ml/d to 9.3Ml/d) located on the Remainder of Portion 13 of the farm Nooitgedacht 268 IT. Report prepared for: Msukaligwa Local Municipality. Report dated: March 2006. Report number: EXE 2006/1. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The subdivision of the Remainder of Portion 35 of the farm Naauwpoort 335 JS, Witbank, and the upgrading of the existing resort (known as the Beach). Report prepared for: Force Fire Protection Services cc. Report dated: April 2006. Report number: EXE 2006/2. (Authors: J. van Driel and A. Erasmus).

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The installation of aboveground diesel tanks on a portion of Portion 60 of the farm Leeuwvallei 297 KT, Burgersfort. Report prepared for: Lion Valley Fuel Depot cc. Report dated: April 2006. Report number: EXE 2006/3. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The establishment of a Residential area on the Remainder of Portion 177 (a portion of Portion 71) of the farm Zeekoewater 311 JS, Witbank. Report prepared for: Mascador 157 (Pty) Ltd. Report dated: August 2006. Report number: EXE 2006/4. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): Rezoning of Portions 339 & 340 (a portion of Portion 177) of the farm Zeekoewater 311 JS, Witbank, from agriculture to residential. Report prepared for: H Janse van Rensburg Trust. Report dated: June 2006. Report number: EXE 2006/5. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of Portion 20 of the farm De Wagendrift 79 JS, Loskop Dam, from agriculture to business. Report prepared for: Elsabe Otto t/a River Cottage. Report dated: June 2006. Report number: EXE 2006/6. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of Portion 1 and the Remainder of Holding 6 of Riverview Agricultural Holdings, Witbank, from Agriculture to residential. Report prepared for: Yuka Trust. Report dated: June 2006. Report number: EXE 2006/7. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The rezoning of Portion 56 (a Portion of Holding 30) Dixon Agricultural Holdings, Witbank, from agriculture to Industrial 3. Report prepared for: Redeemer Business Trust. Report dated: June 2006. Report number: EXE 2006/8. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a rail link as part of the private siding Leeuwpan Coal Mine, Delmas. Report prepared for: Leeupan Coal Mine. Report dated: September 2006. Report number: EXE 2006/9. (Author: A. Erasmus)

Clean Stream Environmental Services. 2007. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The construction of a bridge across a tributary of the Gutshwa River, Gutshwa. Report prepared for: Mbombela Local Municipality. Report dated: August 2007. Report number: BA 2007/3. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Application for Exemption According to Section 28A of the Environment Conservation Act (Act 73 of 1989): The upgrading of a bridge across a tributary of the Ngodini River, Bhuga. Report prepared for: Mbombela Local Municipality. Report dated: August 2007. Report number: BA 2007/5. (Authors: R. van Rensburg and A. Erasmus)

BASIC ASSESSMENT REPORTS

Clean Stream Environmental Services. 2006. Basic Assessment Report: The rezoning of Plot 29 Dixon Agricultural Holdings, Witbank, from Agricultural Holding to Residential, Business and Light Industrial. Report prepared for: Erf 330 Witbank cc. Report dated: August 2006. Report number: BA 2006/1. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: Rezoning of Plot 27 of Portion 3 of Dixon Agricultural Holdings, Witbank, from agriculture to light industrial. Report

prepared for: Xantium Trading 342 (Pty) Ltd. Report dated: October 2006. Report number: BA 2006/2. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: The Rezoning of the Remaining Extent of Portion 56 of the farm Zeekoewater 311 JS, Witbank, from Agriculture to Residential. Report prepared for: Rivato cc. Report dated: October 2006. Report number: BA 2006/3. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: The Construction and operation of a Silo Complex on a Portion of Portion 31 of the farm Kromfontein 30 IS, Van Dyksdrift. Report prepared for: Evening Star Trading 526 (Pty) Ltd. Report dated: November 2006. Report number: BA 2006/4. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: Establishment of a piggery on Portion 1 and the remaining extent of the farm Boschfontein 447 JS, Middelburg. Report prepared for: EDE Farming (Pty) Ltd. Report dated: December 2006. Report number: BA 2006/5. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: The rezoning of the Remaining extent of Portion 87 of the farm Zeekoewater 311 JS, Witbank, from agricultural to residential. Report prepared for: D. Jordan. Report dated: November 2006. Report number: BA 2006/6. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: The rezoning of holding 22 Dixon Agricultural Holdings, Witbank, from agriculture to light industrial. Report prepared for: Elmir Projects. Report dated: November 2006. Report number: BA 2006/7. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: The upgrading of a gravel road and river crossing on the farms Blesbokfontein 31 IS and Boschmansfontein 12 IS. Report prepared for: Tweefontein Complex (Xstrata Coal SA). Report dated: December 2006. Report number: BA 2006/8. (Authors: J. van Driel and A. Erasmus)

Clean Stream Environmental Services. 2006. Basic Assessment Report: The upgrading of a gravel road and two (2) river crossings on the farm Blesbokfontein 31 IS. Report prepared for: Tweefontein Complex (Xstrata Coal SA). Report dated: December 2006. Report number: BA 2006/9. (Authors: J van Driel and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The development of a residential area on Portion 10 of the Farm Springboklaagte 416 JS, Middelburg District. Report prepared for: Steve Tshwete Local Municipality. Report dated: April 2007. Report number: BA 2007/1. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The construction of a vehicular River crossing across a tributary of the Gutshwa River, Gutshwa. Report prepared for: Mbombela Local Municipality. Report dated: October 2007. Report number: BA 2007/3. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The upgrading of a bridge across a tributary of the Ngodini River, Bhuga. Report prepared for: Mbombela Local Municipality. Report dated: October 2007. Report number: BA 2007/5. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The rezoning of holding 21 of Dixon Agriculture Holdings, Witbank, from Agriculture to light industrial and residential. Report prepared for: M. Montgomery; E. Montgomery and J.J. Montgomery. Report dated: May 2007. Report number: BA 2007/6. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The rezoning of Portion 46 of holding 30 of Dixon Agriculture Holdings, Emalahleni, from Agriculture to residential. Report prepared for: Royal Square Investments 438 cc. Report dated: June 2007. Report number: BA 2007/7. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The rezoning of Holding 12 and 13 of Riverview Agricultural Holdings, Emalahleni, from Agriculture to residential. Report prepared for: SA Cyprus. Report dated: June 2007. Report number: BA 2007/8. (Authors: L. Richards and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The proposed rezoning of Portion 97 of the farm Zeekoewater 311 JS, Emalahleni, from Agriculture to residential. Report prepared for: Winner's Circle. Report dated: May 2007. Report number: BA 2007/9. (Authors: L. Richards and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The rezoning of Portion of Portion 120 of the farm Kromdraai 292 JS, Witbank, from Agriculture to light industrial and residential. Report prepared for: Clisa 74 cc. Report dated: November 2007. Report number: BA 2007/10. (Authors: L. Richards and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: Proposed rezoning of Portion 2 of holding 15 and the remaining extent of holding 17 of Bethal Agricultural Holdings, Bethal, from agriculture to residential. Report prepared for: Mr P.T. Austin and Mrs. Y.E.M Austin. Report dated: August 2007. Report number: BA 2007/11. (Authors: L. Richards and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: Proposed rezoning of Holding 22 of Bethal Agricultural Holdings, Bethal, from agriculture to residential. Report prepared for: Mr. J.J. Malan. Report dated: August 2007. Report number: BA 2007/12. (Authors: L. Richards and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The installation of an above-ground diesel tank on the remainder of the Farm Van Stadensdam 344 IS, Charl Cilliers. Report prepared for: Vermaas Brandstof Verspreiders BK. Report dated: November 2007. Report number: BA 2007/19. (Authors: R. van Rensburg and A. Erasmus)

Clean Stream Environmental Services. 2007. Basic Assessment Report: The transformation of a public open space - Erf 1882, Emalahleni, to be a sports field. Report prepared for: Robert Carruthers School. Report dated: November 2007. Report number: BA 2007/21. (Authors: L. Richards and A. Erasmus)

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORTS (EMPR'S)

Clean Stream Environmental Services. 2003. Environmental Management Programme Report: Leeuwpan Coal Mine, Addendum Nr. 3. Report prepared for: Leeuwpan Coal Mine. Report dated: July 2003. (*Authors: A. Erasmus*)

Clean Stream Environmental Services. 2004. Addendum to the Delmas Silica Environmental Management Programme Report. Report prepared for: Delmas Silica. Report dated: April 2004. Report number: EMPR 2004/1. (Authors: A. Erasmus)

SCOPING REPORTS - MINES

Clean Stream Environmental Services. 2004. Scoping Report: Proposed Boschman's North Opencast Section, Tweefonein Division. Report prepared for: Xstrata Coal (Pty) Ltd. Report dated: September 2004. Report number: EIA 2004/Sep. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Scoping Report: Proposed Stuart Coal Mine, Delmas. Report prepared for: Stuart Coal Mine (Pty) Ltd. Report dated: November 2004. Report number: EIA 2004/Nov. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Scoping Report: Proposed Goedgevonden Expansion Project Tweefontein Division. Report prepared for: Xstrata Coal (Pty) Ltd. Report dated: May 2004. Report number: EIA 2004/Mar. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Scoping Report: Proposed Conveyor from Boschman's to Witcons, Tweefontein Division. Report prepared for: Xstrata Coal (Pty) Ltd. Report dated: March 2005. Report number: EIA 2005/Mar. (Author: A. Erasmus)

PEER REVIEWS

Clean Stream Environmental Services. 2006. Review: Scoping process – The relocation of the FFS Tar processing plant from Secunda to Evander. Report prepared for: Walker Park Golf Club. Report dated: February 2006. Report number: REVIEW 01. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Review: Proposed road across the remainder of Portion 1 of the farm Leeuwvallei 297 KT, Burgersfort. Report prepared for: WJ Fouche Beleggings BK. Report dated: November 2006. Report number: REVIEW 02. (Author: A. Erasmus)

FEASABILITY STUDY

Clean Stream Environmental Services. 2004. Feasibility Study: Squatter Camp, Kwa-Quqa, Witbank. Report prepared for: Emalahleni Local Municipality. Report dated: December 2004. Report number: FS/2004/1. (Author: A. Erasmus)

ENVIRONMENTAL MANAGEMENT PLAN

Clean Stream Environmental Services. 2006. Environmental Management Plan: Plot 81 Jackaroo Agriculture Holdings, Witbank. Report prepared for: J.M. Pretorius Holdings. Report dated: November 2006. Report number: EM PLAN 2006/1. (Author: A. Erasmus)

Clean Stream Environmental Services. 2006. Environmental Management Plan: The establishment of a township on the Remainder of Portion 142 (Portion of Portion 37) of the farm Klipfontein 322JS, Witbank. Report prepared for: Mr. T.C. Vermaak. Report dated: December 2006. Report number: EMP 2006/1. (Author: A. Erasmus)

CLOSURE PLAN/REPORT

Clean Stream Environmental Services. 2006. Closure Plan for Lakeside Siding, Kendal. Report prepared for: Leeuwfontein Colliery (Pty) Ltd. Report dated: February 2006. Report number: 2006/1. (Author: A. Erasmus)

PUBLIC PARTICIPATION REPORTS

Clean Stream Environmental Services. 2002. Public Participation Report: Proposed diesel and paraffin depot on the remainder of Erf 272/R of Princess Street, Standerton. Report prepared for: Quantum Energy (Pty) Ltd. Report dated: October 2002. Report number: Oct-02. (Author: A. Erasmus)

Clean Stream Environmental Services. 2004. Grootegeluk Coal Mine: Public Participation as required in terms of the EMPR and IWULA Process. Report prepared for: Grootegeluk Coal Mine. Report dated: October 2004. Report number: Oct-04. (Author: A. Erasmus)

Clean Stream Environmental Services. 2005. Grootegeluk Coal Mine: Public Participation as required in terms of the EMPR and IWULA Process. Follow up Public Participation. Report prepared for: Grootegeluk Coal Mine. Report dated: July 2005. Report number: Jul-05. (Author: A. Erasmus)

Clean Stream Environmental Services. 2005. New Denmark Colliery. Public Participation as required in terms of the EMPR and IWULA Process. Report prepared for: New Denmark Colliery. Report dated: October 2005. Report number: Oct-05. *(Author: A. Erasmus)*

Clean Stream Environmental Services. 2005. Kromdraai Opencast, Landau Colliery. Public Participation as required in terms of the EMPR and IWULA Process. Report prepared for: Kromdraai

Opencast Landau Colliery. Report dated: November 2005. Report number: Nov-05. (Author: A. Erasmus)

OTHER REPORTS COMPLETED

Clean Stream Environmental Services. 2007. REPORT: Relocation of Animals and Plants from the proposed Kalbasfontein Coal Mine Area, Witbank. Report prepared for: Kumba Resources. Report dated: February 2007. Report number: Report Feb 2007. (Author: A. Erasmus)

Clean Stream Environmental Services. 2007. REPORT: Initial Risk Assessment for the Zonnebloem Project, Middelburg. Report prepared for: Xstrata Coal South Africa. Report dated: May 2007. Report number: Report May 2007. (Author: A. Erasmus)

Clean Stream Environmental Services. 2007. REPORT: Ecological Studies with regards to a portion of the farm Hamelfontein 384 IS, Grootdraai Dam, Standerton. Report prepared for: Elmir Projects. Report dated: June 2007. Report number: Report June 2007. (*Author: A. Erasmus*)

Clean Stream Environmental Services. 2007. REPORT: Klarinet Integrated Housing Development: Environmental Scan. Report prepared for: Bigen Africa (Pty) Ltd. Report dated: October 2007. Report number: Report October 2007. (Author: A. Erasmus)

CURRICULUM VITAE OF SPECIALIST: PROF ANTON CARL VAN VOLLENHOVEN

Tertiary education

- BA 1986, University of Pretoria
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria
- MA Archaeology 1992, University of Pretoria
- Post-Graduate Diploma in Museology 1993 (cum laude), University of Pretoria
- Diploma Tertiary Education 1993, University of Pretoria
- DPhil Archaeology 2001, University of Pretoria.
- MA Cultural History 1998 (cum laude), University of Stellenbosch
- Management Diploma 2007 (cum laude), Tshwane University of Technology
- DPhil History 2010, University of Stellenbosch

Employment history

- 1988-1991: Fort Klapperkop Military Museum Researcher
- 1991-1999: National Cultural History Museum. Work as Archaeologist, as well as Curator/Manager of Pioneer Museum (1994-1997)
- 1999-2002: City Council of Pretoria. Work as Curator: Fort Klapperkop Heritage Site and Acting Deputy Manager Museums and Heritage.
- 2002-2007: City of Tshwane Metropolitan Municipality. Work as Deputy Manager Museums and Heritage.
- August 2007 present Managing Director for Archaetnos Archaeologists.
- 1988-2003: Part-time lecturer in Archaeology at the University of Pretoria and a part-time lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.
- 2014: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- 2015: Appointed extraordinary professor in history at the Mahikeng Campus of the Northwest University

Other

- Published 75 articles in scientific and popular journals on archaeology and history.
- Author and co-author of over 580 unpublished reports on cultural resources surveys and archaeological work. A list of reports can be viewed on www.archaetnos.co.za
- Published a book on the Military Fortifications of Pretoria.
- Contributed to a book on Mapungubwe.
- Delivered more than 50 papers and lectures at national and international conferences.
- Member of SAHRA Council for 2003 2006.
- Member of the South African Academy for Science and Art.
- Accredited professional member of Association for South African Professional Archaeologists.
- Accredited professional member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.
- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2019).

ASAPA Accreditation number: 166 SASCH Accreditation number: CH001

Curriculum vitae

Heidi Fourie

Title: Dr

Surname: Fourie

Name: Heidi

Citizenship: South African

Email: heidicindy@yahoo.com

Identity number: 6502020080080

Disability: High-frequency neural sensory deafness.

Contact: 012 993 3110 (h) 012 0000040 (w)

Employment: Curator of Palaeontology Collections. Active in research on the skeletal morphology of the Therocephalia (mammal-like reptile) of the Karoo.

Highest qualification: Ph.D Palaeontology (B.Sc in Geology and Zoology).

Member of: Palaeontological Society of South Africa. International Congress of Vertebrate Morphologists.

Field work: Mapped fossil localities around the Groot Brak River between Steynsburg and Middelburg in the Eastern Cape Province and currently holds the permit. Also done field work in Gauteng, Limpopo, Mpumalanga, North West and Free State Provinces.

Knowledge: Fossil preparation, collection management, occupational, health and safety, curation principles and archival practises. Worked in the field of palaeontology since 1994 and during this period has curated the fossil collections. Attended several National and International Conferences.

Assessments: Involved in Palaeontological Impact Assessments since 2012. Amongst others, I did the field studies for the Dorper Wind Energy Project, Greenside Colliery, Ngululu Opencast mine, Lesotho Border Road and Benicon Park Phase 1 Palaeontological Impact Assessments. Assessments done on projects in Gauteng, Limpopo, North West, Free State, Eastern Cape and Mpumalanga Provinces.

Publications:

Fourie, H 1993. A detailed description of the cranial morphology of *Emydops* (Therapsida: Dicynodontia). *Palaeontologia Africana*, **30:** 1-5.

Thackeray, J.F., Bellamy, C.L., Bellars, D., Bronner, G., Bronner, L., Chimimba, C., **Fourie, H.**, Kemp, A., Krűger, M., Plug, I., Prinsloo, S., Toms, R., van Zyl, A.J., and Whiting, M.J. 1997. Probabilities of conspecifity: application of a morphometric technique to modern taxa and fossil specimens attributed to *Australopithecus* and *Homo. South African Journal of Science*, **93**: 195-196.

Fourie, H. 2007. The postcranial skeletal anatomy of the therocephalian *Regisaurus* (Therapsida: Regisauridae) and its utilisation for biostratigraphic correlation. *Palaeontologia Africana*, **42:** 1-16.

Fourie, H. 2008. Science at the Transvaal Museum – Palaeontology 1897-1994. *Annals of the Transvaal Museum*, **45:** 16-20.

Fourie, H. 2009. The postcranial skeleton of the basal therocephalian *Glanosuchus macrops* (Scylacosauridae) and comparison of morphological and phylogenetic trends amongst the Theriodontia. *Palaeontologia Africana*, **44**: 27-39.

Fourie, H. 2013. The postcranial description of *Ictidosuchoides* (Therapsida: Therocephalia: Baurioidea). *Annals of the Ditsong National Museum of Natural History*, **3:** 1-10.

Fourie, H. 2013. Radon detection in Karoo fossil material at the Ditsong: National Museum of Natural History, Pretoria. *Ditsong: National Museum of Cultural History, Research Journal*, **8:** 24-32.

Methodology:

The type of scope is determined by the geological formation and its palaeontological sensitivity ranking determined through the Fossil Heritage Layer Browser (SAHRA).

Palaeontological Exemption Letter: Sensitivity of Insignificant to Zero or Low.

Protocol: Low Sensitivity.

Desktop Study: Moderate and High Sensitivity.

Field Assessment: Very High Sensitivity.

The report aims to provide comment and recommendations on the potential impacts that the proposed development could have on the fossil heritage of the area and to state if any mitigation or conservation measures are necessary.

Most fossil containing geological formations will be ranked as Moderate, High to Very High.

The Environmental Assessment Practitioner must map the location of the proposed development on SAHRIS, once mapped, they will be able to switch on the palaeontological sensitivity layer to determine whether or not a Palaeontological Impact Assessment is necessary.

CURRICULUM VITAE

Name: Catharina Elizabeth Venter trading as Kyllinga Consulting

Position: Senior Ecologist and Wetland Scientist

Date of Birth: 29 December 1979

Nationality: South African

Languages: Afrikaans, English

EDUCATIONAL QUALIFICATIONS

M.Sc (Botany), University of Pretoria (2003)

- B.Sc Hons (Botany), University of Pretoria (2001)
- B.Sc (Environmental Sciences), University of Pretoria (2000). Majored in Geography and Botany
- Matriculated, Sasolburg High School (1997)

Additional

- Introduction to ArcGIS 1 (2006)
- Bringing your data into ArcGIS (2006)
- Introduction to ArcView 3.x (2003).

FIELDS OF EXPERTISE

• Ecological Assessment:

Ecological Assessments as part of the Environmental Impact Assessment Process

Wetland Assessment:

Wetland Assessments as part of the Environmental Impact Assessment Process and Water Use Applications, as well as rehabilitation plans for wetlands, including planning or the Working for Wetlands programme. Large scale wetland assessments (catchment scale).

GIS:

Compilation of maps for submission as part of Environmental Impact Assessment Process. Creating spatial databases and large scale wetland maps (catchment scale). Projection conversions and matching/overlaying different format GIS maps.

Environmental Impact Assessment

Undertaken numerous Environmental Scoping Reports, as required by the Environment Conservation Act, 1989 (Act 73 of 1989), the National Environmental Management Act, 1998 (Act 107 of 1998), as amended and the Development Facilitation Act, 1995 (Act 67 of 1995). Project experience includes the establishment of various housing typologies, golf courses, commercial and industrial projects, infrastructure development (roads), resorts and/or game lodges as well as filling stations.

• Public Participation:

Undertaken numerous public participation processes, ranging from basic to extensive, as required by relevant environmental legislation.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Professional Natural Scientist (Pr.Sci.Nat) in the field of Botanical Science (Reg no. 400048/08)
- Member of the Botanical Society of South Africa

EMPLOYMENT HISTORY EXPERIENCE

Kyllinga Consulting (July 2015 - present)

Senior Ecologist responsible for wetland and ecological specialist assessments.

Spatial Ecological Consulting (February 2010 – June 2015)

Senior Ecologist responsible for wetland and ecological specialist assessments.

• Wetland Related Assessments

More than 40 wetland assessments conducted between 2010 and 2015.

Vegetation Assessments

Approximately 16 vegetation assessments between 2010 and 2015.

Management Plans

Completed two ecological management plans.

MSA Group Services (previously Exigent Environmental CC) (August 2004 – January 2010)

Environmental Scientist responsible for ecological and wetland assessments and the compilation of maps. Also conducted various scoping and EIA applications and EMPRs.

• Ecological Assessments

In excess of 50 ecological assessments conducted between 2004 and 2010, including managing the inclusion of the fauna specialist assessments.

Wetland Assessments

More than 60 wetland verification projects, wetland delineations and wetland assessments, completed between 2004 and 2010.

As well as:

Rehabilitation Projects; Fatal Flaw / Screening Assessments; National Department of Agriculture Authorisations; Mining Related Assessments; Private, Public Partnership Projects; Resource Management Plans (RMP); Environmental Management Plans; Environmental Management Programme; Environmental Exemption Processes; Basic Assessments; Environmental Impact Assessments

Part-time employment (2002-2004)

Tutor for botany practicals; Assisting Wildlife management students with Braun-Blanquette analysis; Researcher for a project on the vegetation communities and ecology of the Kruger National Park; Research assistant for the analysis of street trees in Tshwane urban forest; Various part time projects related to vegetation and wetlands

COUNTRIES OF WORK EXPERIENCE

- South Africa
- Lesotho
- Botswana
- Mozambique

PAPERS AND PUBLICATIONS

Co-author and data contributor to: SIEBEN, E. *et al.* The vegetation of inland wetlands with salt-tolerant vegetation in South Africa: description, classification and explanatory environmental factors, submitted to the South African Journal of Botany for review in Feb 2015.

Co-author and data contributor to: SIEBEN, E. *et al.* The herbaceous vegetation of subtropical freshwater wetlands in South Africa: description, classification and explanatory environmental factors, submitted to the South African Journal of Botany for review in Feb 2015.

Co-author and data contributor to: SIEBEN, E. *et al.* The vegetation of grass lawn wetlands of floodplains and pans in semi-arid regions of South Africa: description, classification and explanatory environmental factors, submitted to the South African Journal of Botany for review in Jan 2015.

Co-author of several vegetation descriptions in: MUCINA, L. & RUTHERFORD, M.C. (eds) 2006. The Vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria.

VENTER, C.E. & BREDENKAMP, G.J. In prep. Major plant communities on the Mfabeni swamp, St Lucia. Bothalia.

VENTER, C.E.; BREDENKAMP, G.J. & GRUNDLING, P-L. 2003. Plant community types, and their association with habitat factors as ecosystem driving forces, of Mfabeni swamp. Proceedings of the congress: *Environment of the St Lucia Wetland: Processes of Change*, Cape Vidal, September 4th- 7th, 2003.

VENTER, C.E.; BREDENKAMP, G.J.; GRUNDLING P-L. 2002. Vegetation change on rehabilitated peatland on Rietvlei Nature Reserve. *Kudu* 46(1):53-63.

PRESENTATIONS

Venter, C.E.; Bredenkamp, G.J. & Grundling, P-L. 2003. Plant community types, and their association with habitat factors as ecosystem driving forces, of Mfabeni Swamp. *Environment of the St Lucia Wetland: Processes of Change*, Cape Vidal, September 4th- 7th, 2003.

Poster Presentations

Venter, C.E.; Bredenkamp, G.J.; Grundling P-L. 2002. Baseline vegetation surveys of rehabilitated peatland on Rietvlei Nature Reserve. SAAB Converence. Grahamstown.

Venter, C.E.; Bredenkamp, G.J.; Grundling P-L. 2003. Vegetation change on rehabilitated peatland on Rietvlei Nature Reserve. SAAB Converence. Pretoria.

Curriculum Vitae

JACOBUS CASPARUS PETRUS (JACO) VAN WYK

Identity number 680804 5041 08 4

Gender Male

Date of birth4 August 1968NationalitySouth African

Home languages Afrikaans, fluent in English

P.O. Box 25085, Monument Park, Pretoria, 0105.

Tel no +27 12 347 6502, Cell +27 82 410 8871

E-mail jcpvanwyk@absamail.co.za

Present position Co-Department Head, Environmental Education & Life

Sciences, Hoërskool Waterkloof

Consultant Specialist Environmental Assessments, EIAs, writing, photo-

recording

Qualifications B.Sc. (U.F.S.) B.Sc. (Hon.) (U.F.S.), H.E.D (U.F.S.), M.Sc.

(U.F.S.)

Honours Foundation of Research Development bursary holder

Professional Natural Scientist (Zoology) – S.A Council for Natural Scientific Professions, Registration # 400062/09

Notable Research Contribution: In-depth field study of the giant bullfrog

Formal Courses Attended Outcomes Based Education, University of the South Africa (2002)

Introductory Evolution, University of the Witwatersrand

(2008)

OBE, GET & FET training, 2002-2008, Education

Department

Employment history

2009 – Present Doing surveys of vertebrate groups and writing Environmental impact assessment reports.

2000 – Present Co-Department Head for Environmental Education & Life Sciences, Hoërskool Waterkloof, Pretoria.

1995 - 1999 Teaching Biology (Grades 8 – 12) and Physics / Chemistry (Grades 8 – 9) at the Wilgerivier High School, Free State. Duties included teaching, mid-level management and administration.

July 1994 – Dec 1994 Teaching Botany practical tutorials to 1st year students at the Botany & Zoology Department of the Qwa-Qwa campus of the University of Free State, plant collecting, amphibian research

1993 - 1994 Mammal Research Institute (University of Pretoria) research associate on the Prince Edward Islands: topics field biology and population dynamics of invasive alien rodents, three indigenous seals, invertebrate assemblages, censussing king penguin chicks and lesser sheathbills, and marine pollution

1991 - 1993 Laboratory demonstrator for Zoological and Entomological practical tutorials, and caring for live research material, University of the Free State

1986 - 1990 Wildlife management and eco-guiding, Mt. Everest Game Farm, Harrismith

Professional Achievement Research: Author and co-author of 52 scientific publications in peer reviewed and popular subject journals, and >350 contractual EIA research reports. Extensive field work and laboratory experience in Africa

Public Recognition: Public speaking inter alia radio talks, TV appearances

Hobbies: Popular writing, travel, marathon running, climbing (viz Kilimanjaro), photography, biological observations, public speaking and bass fishing

MORNE BURGER: GROUNDWATER SPECIALIST



Key skills

Strong analytical and problem-solving skills. Solid written and verbal communications skills. Strong interpersonal skills and the ability to work with clients and internal stakeholders at all levels of the organization.

Experience

2011-2015

Hydrogeologist • Scientist • Geo Pollution Technologies

2015-2019

Hydrogeologist • Project manager • Geo Pollution Technologies

2019-current

Hydrogeologist • Office manager • Geo Pollution Technologies

From 2011 to 2021 Morne has been involved in numerous successful groundwater related projects:

Water supply throughout Southern Africa;

Contamination studies with focus on acidic contamination from various metal and coal mines, Cr (VI) and nitrate contamination;

Risk based approached to compliance limits and lining requirements;

Development of remediation and rehabilitation strategies for various industries and mines;

Mine closure studies;

Implementation of treatment technologies;

Development of groundwater guidelines;

Qualifications

- B.Sc. Geology University of the Free State, 2006
- B.Sc. (Hons) Geology University of the Free State, 2007
- B.Sc. (Hons) Geohydrology University of the Free State, 2008
- M.Sc. (cum laude) Geohydrology University of the Free State, 2010

Short courses

The vadose zone: Hydrology of Variable Saturation in Engineering Geology and Hydrogeology - University of Pretoria - 20 February 2019

Hydropedology and wetland functioning short course - Water Business Academy - 19 November 2019

Geochemistry and contaminant transport modelling - University of the Western Cape - 16-18 May 2011

Professional registrations

South African Council for Natural Scientific Professions (SACNASP) - Membership nr: 400296/12

Ground Water Division South Africa (GWDSA) - Membership nr: 462/16

Network of Industrially Contaminated Land in Africa (NICOLA) - Membership nr: NM36c/2017

Papers and publications

- M. Burger and Dr. VdA Coetsee, Setting water quality compliance limits for Contaminated groundwater in fractured rock aquifers, South African Groundwater Conference, September 2014
- P. D. Vermeulen M. Burger A. van Wyk, Potential Hydrological Interaction of a Gold Mine and a Coal Mine in South Africa, Mine Water Environ (2014) 33:3-14
- P. D. Vermeulen, M. Burger, A. van Wyk, E. Lukas, Using Environmental Isotopes in a Coal Mine and a Gold Mine to Determine Groundwater Interaction, Mine Water Environ (2014) 33:15-23



Consulting Environmental Scientists

ISO 9001:2015 | B-BBEE Level Two

Offices in: Gauteng, Western Cape, KwaZulu-Natal & Mozambique



www.gptglobal.com

Albert van Heerden: GROUNDWATER SPECIALIST



Key skills

Research and consulting activities in the field of hydrogeology with emphasis on:

Mining hydrogeology; groundwater monitoring; contaminant hydrogeology; conceptual, numerical and analytical modelling of groundwater flow; field data collection and sampling; data processing and interpretation and report writing for hydrogeological specialist studies for mining and chemical related industries.

Experience

Hydrogeologist Student • M.Sc. student/part time employee • Institute for Groundwater Studies (IGS)

2017-2018

Hydrogeologist • Junior Scientist • Aurecon

2018-current

Hydrogeologist • Scientist and Project Manager • Geo Pollution Technologies

Key Account Manager (KAM) of Omnia Fertilizer (Pty) Ltd, Geovicon Environmental (Pty) Ltd and Eyethu (Pty) Ltd.

From 2017 to 2021 Albert has been involved in numerous successful groundwater related projects:

Water supply throughout Southern Africa;

Contamination studies with focus on acidic contamination from various metal and coal mines, Cr (VI) and nitrate contamination;

Mining hydrogeology;

Conceptual, numerical and analytical modelling of groundwater flow using MODFLOW (GMS);

Risk based approached to compliance limits and lining requirements;

Development of remediation and rehabilitation strategies for various industries and mines;

Mine closure studies;

Implementation of treatment technologies;

Qualifications

B.Sc. Geology - University of the Free State, 2014

B.Sc. (Hons) Geology - University of the Free State, 2015

M.Sc. Hydrogeology - University of the Free State, 2018

Short courses

Technical Report Writing Course, 29th-30th of April 2020 (Johannesburg)

Norcaz Training Academy (Managing & Developing Key Accounts), 4th-5th of November 2019 (Johannesburg)

Enviro Workshop (Remediation Workshops),6th-7th of August 2019 (Johannesburg)

Professional registrations

South African Council for Natural Scientific Professions (SACNASP Candidate) - Membership nr: 120177

Ground Water Division South Africa (GWDSA) - Membership nr: 13073/19

Papers and publications

A. van Heerden and F. de Lange, 2018, Augmentation of rural water supply in the Thaba Nchu area-Groundwater as a sustainable medium to long term solution - M.Sc. Thesis.

10.4 The Specialist

Note: Duplicate this section where there is more than one specialist.

I <u>Albert van Heerden</u>, as the appointed specialist hereby declare/affirm the correctness of the information provided as part of the application, and that I:

•	in	terms of	the	general	requi	iremen	t to	be	ind	epend	lent	(tick	w	nic	h i	s app	lical	ble):
---	----	----------	-----	---------	-------	--------	------	----	-----	-------	------	-------	---	-----	-----	-------	-------	-----	----

\setminus /	other than fair remuneration for work performed/to be performed in terms of this application, have no business,									
	financial, personal or other interest in the activity or application and that there are no circumstances that may									
	compromise my objectivity; or									

am not independent, but another EAP that is independent and meets the general requirements set out in Regulation 13 has been appointed to review my work (Note: a declaration by the review specialist must be submitted);

- have expertise in conducting specialist work as required, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- will ensure compliance with the EIA Regulations 2014;
- 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 application;
- will take into account, to the extent possible, the matters listed in regulation 18 of the regulations when preparing the application and any report, plan or document relating to the application;
- will disclose to the proponent or applicant, registered interested and affected parties 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 or the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority (unless access to that information is protected by law, in which case I will indicate that such protected information exists and is only provided to the competent authority);
- declare that all the particulars furnished by me in this form are true and correct;
- am aware that it is an offence in terms of Regulation 48 to provide incorrect or misleading information and that a person
 convicted of such an offence is liable to the penalties as contemplated in section 49B(2) of the National Environmental
 Management Act, 1998 (Act 107 of 1998).



Signature of the specialist

Geo Pollution Technologies (Pty) Ltd

Name of company

May 2020

Date