
Curriculum vitae: Mr D Botha

Name : **BOTHA, DE WET**
Date of Birth : 20 June 1977
Profession/Specialisation : Principle Environmental Scientist & Biodiversity
Specialist Nationality : South African
Years' experience : 22+

Key Experience

Mr Botha has extensive experience in conducting a broad range of applications related to authorisation from the various authorities managing Environmental Legislation in South Africa. Mr Botha has completed numerous EIA's and Basic Assessment Report applications and Audits. He has conducted EIA reviews and has acted in a specialist advisory role to other consultants/applicants. Management plans compiled include Environmental Management Plans, Open Space EMPs, Wetland EMP's and Waste Management Plans. Mr Botha is a Registered Environmental Assessment Practitioner (EAP)(2019/1209) with the Environmental Assessment Practitioners Association of South Africa (EAPASA).

The practitioner has extensive and specialised experience in biodiversity, wetland and aquatic assessment and delineation, as well as applications for Water Use Licenses. He is registered as a Professional Natural Scientist (Pr.Sci.Nat. Reg No. 119979) with the Scientific Council of Natural Scientific Professions (SACNASP).

Additional to this, Mr Botha also has experience in Specialist Faunal and Floral Surveys, Wetland and Grassland Rehabilitation and Baseline Agricultural Potential Studies.

Mr Botha is an experienced Auditor and Environmental Control Officer. GIS data and spatial modelling is included in Mr Botha's range of capabilities, along with GIS sensitivity mapping and Project Management.

As a specialist interest, Mr Botha has been involved with research and studying the habitat area of the Juliana's Golden Mole, a Red List threatened species, in association with the University of Pretoria. Mr Botha has been conducting Golden Mole Assessments for the past 20 years and has been involved in the Biodiversity Management Plan for the Bronberg, Pretoria and input into the Gauteng Conservation Plan (C-Plan v4).

Education & Key qualifications

MAGISTER ARTIUM (M.A. Environmental Management)

University of Johannesburg (2005-2006)

- Thesis: *Establishing Guidelines for Environmental Management Plans for Golf Course Developments in Gauteng Province.*
- Syndicate research: *Baseline Environmental Assessment investigating the flow of Mercury through the system at the University of Johannesburg in Mercury containing Lighting as a by- product.*
- The biosphere & environmental studies.
- Environmental analysis, management skills & perspectives.

DIPLOMA: REMOTE SENSING AND IMAGE PROCESSING

Rand Afrikaans University (2001)

DIPLOMA: GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Rand Afrikaans University (2001)

BACHELOR OF ARTS (HONOURS) (BA. (Hons) Geography and Environmental Management)

Rand Afrikaans University (2001)

Modules completed:

- *Geomorphology (cum laude)*

- *Energy Technology*
- *Remote Sensing and Satellite Imagery*
- *Geographic Information Systems*
- *Philosophy and Methodology of Geography*

POST GRADUATE HIGHER EDUCATIONAL DIPLOMA (PHED).

Rand Afrikaans University (1999-2000)

BACHELOR OF ARTS (BA. Geography and Environmental Management)

Rand Afrikaans University (1996-2000)

Supplementary Qualifications

- Hydropedology and Wetlands (2021)– WetRest Centre for Wetland Research and Training | Digital Soils Africa (DSA)
- Wetland Legislation – Law application in wetland management (2020) WetRest Centre for Wetland Research and Training
- Hydropedology and Wetland Functioning – (Water Business Academy / Terra Soil Science) (2018)
- General Water Use Authorisations Workshop (2017) IMBEWU Sustainability
- Understanding the Basics of Wetland Ecosystems (2017) Gauteng Wetland Forum
- Wetland Plant Taxonomy (2017) Water Research Commission
- Financial Provision Regulations and Mine Closure Requirements (2016) IMBEWU Sustainability Legal Specialists.
- SASS5 Aquatic Biomonitoring Training Course (DWA, Ground Truth) (2014)
- Tools for Wetland Assessments (Rhodes University) (2011) (Cum Laude) - Certified
- Short Course in Soil Classification and Wetland Delineation (Terra Soil Science) (2008)
- Wetland and Riparian Delineation Course (DWA Accredited) (2008)
- Practical Field Training – Golden Mole Field Surveys (Pretoria of University; Dr. S. Maree) (2007)
- Lead Auditors' Course (Environmental) ISO 14000 (University of Johannesburg) (2006)
- Geographical Information Systems (GIS) (Run by Geographical Information Management Systems (GIMS) - Introduction to Arcview GIS (2000)
- Geographical Information Systems (GIS) (Run by Geographical Information Management Systems (GIMS) – Introduction and Advance ArcInfo (2000)
- Geographical Information Systems (GIS) Introduction to MapInfo (2000)
- Geographical Information Systems (GIS) Advance and Specialist Map-Info (2000)

Professional affiliations

- EAPASA – Reg. EAP (2019/1209)
- SACNASP– Pr. Sci. Nat. (119979)
- Member of the International Association for Impact Assessors (IAIAsa) (1653)
- Member of the Gauteng Wetland Forum
- Member of South African Wetland Society
- Certified Green Drop Auditor

Employment record

August 2005 – Present	Prism EMS, Managing Director, Principal EAP, Lead Specialist Consultant
April 2004 – July 2005	Holgate and Associates, Environmental Scientist
January 2003 – February 2004	North Westminster Community College (UK), HOD Humanities Dept.
January 2002 – December 2002	Kelmscott Secondary School, (UK), HOD Geography
January 2001 – December 2001	Hoërskool Vryburger, Germiston, Educator (Geography)
August 1999 – December 2000	The Knowledge Factory (Primedia), GIS Specialist/Product Owner

Experience record (Key Projects)

Relevant Project Experience (more detail available on request)

Mr Botha has more than twenty-two (22) years' experience in the field of Environmental Management, nineteen (19) years' experience as a wetland scientist and sixteen (16) years' experience as a golden mole specialist. He has conducted, in excess of:

- 50 Environmental Conservation Act Applications
- 10 Development Facilitation Act – Environmental Assessments
 - 10 Environmental Scoping Reports
- 15 Scoping and Environmental Impact Assessments (EIA)
- 35 Basic Environmental Assessments (BAR)
- 100 Wetland Delineations, Assessments and Rehabilitations
- 40 Ecological and Biodiversity Assessments
- 40 Environmental Audits
- 20 Section 24G Rectification Applications (Legal Applications)
- 80 Environmental Management Programmes (EMPr)
- 20 Water Quality Assessments (Rivers, dams etc.)
- 25 Water Use License Applications (WULA)
- 20 Air Emissions Licenses (AEL)

Due to the vast list of studies and projects conducted only a summary of some of the key projects conducted over the last 10 years are documented below.

Environmental Assessments

Environmental Impact Assessment (EIA)

- **Greengate Ext. 105** – Environmental Impact Assessment (EIA) for a mixed-use development comprising a Filling Station, Business, Commercial and Retail facilities (including Water Use License (WUL)).
- **Northam Platinum** - Environmental Impact Assessments (EIA) for an Integrated Environmental Authorisation (including Water Use License (WUL)) to develop a new shaft complex at the mine.
- **Coega Tank Farm** - Environmental Impact Assessments (EIA) for an Integrated Environmental Authorisation (including Air Emissions License (AEL)) to develop a fuel tank farm in zone 7 of COEGA
- **Eco Planet Bamboo** - Environmental Impact Assessments (EIA) and Air Emissions License (AEL) for a Core Carbon Manufacturing Plant in the Grahamstown area.
- **Rand Water VG Residue Line** - Environmental Impact Assessments (EIA) for the installation of the Rand Water Vereeniging water treatment pump station residue pipeline. The pipeline and associated infrastructure is installed from the Rand Water Vereeniging Pump Station to the connection point at the Rand Water Zuikerbosch Pump Station.
- **Chalmar Beef Composting** - Environmental Impact Assessments (EIA) for an Integrated Environmental Authorisation (including Water Use License and Waste License) to develop a composting facility for Chalmar Beef, linked to their abattoir facility and operations.
- **Portion 31 Nietgedacht 535 - Waste Handling Facility** - Environmental Impact Assessments (EIA) for an Integrated Environmental Authorisation (including Water Use License and Waste License) to develop a waste transfer station (or waste handling facility) on the remainder of portion 31 of the farm Nietgedacht 535 JQ.
- **South Africa Happy Island Water World** - Environmental Impact Assessments (EIA) and Water Use License Application (WULA) for a recreational water park development.
- **Montrose Ultra City (N3)** - Environmental Impact Assessments (EIA) and Water Use License Application (WULA) for a Filling station, Truck Stop and Ancillary uses, Sewage Treatment Facility.
- **Vista Park Ext 3** - Environmental Impact Assessments (EIA) and Water Use License Application (WULA) for a Provincial Hospital and mixed used development in the Bloemfontein area.

Basic Environmental Assessments (BAR)

- **Manganese Dioxide Plant (Coega)** – Basic Environmental Assessment (BAR), Air Emissions License (AEL) and Specialist studies.
- **Greengate Extensions 100 and 101, 102 and 103, and 104 and 106** – individual Basic Environmental

Assessments (BAR) and Specialist Assessments.

- **Trac N4, R539 Schoemanskloof Road Upgrade** – Borrow Pits, Basic Environmental Assessments (BAR) and Specialist assessments.
- **Truck Dealership - Ptn 168 Bultfontein 533JQ** - Basic Environmental Assessments (BAR) for Truck Dealership and ancillary uses on Portion 168 of the Farm Bultfontein 533JQ.
- **Steyn City Fuel Storage Facility** - Basic Environmental Assessments (BAR) for the Steyn City Fuel Storage Facility and ancillary uses.
- **Midridge Park Ext 25** - Basic Environmental Assessments (BAR) and Water Use License Application (WULA) for the Midridge Park Ext 25 commercial township development and associated infrastructure.
- **Nederburg | Portion 3 of the farm Nederburg Estates No 613** - Basic Environmental Assessments (BAR) and Water Use License Application (WULA) for the rezoning of Portion 3 of the farm Nederburg Estates No 613 and development of a Residential Township and installation of infrastructure.
- **Bergbron Ext 14** - Basic Environmental Assessments (BAR) for the Bergbron Ext 14 Residential township development and associated infrastructure.
- **Rose Road Intersection | GDRT** - Basic Environmental Assessments (BAR) and Water Use License Application (WULA) for the Rose Road Intersection with William Nicol Drive.
- **K33 | GDRT** - Basic Environmental Assessments (BAR) and Water Use License Application (WULA)

Environmental Management Programmes (EMPr)

- **Bedworth Park Ext 8** - A site specific Environmental Management Programme (EMPr) was developed specifically for the construction phase of Bedworth Park Ext 8; a mixed use development. The EMPr also caters for infrastructure installation within the development.
- **Northam Platinum - EMPr amendment and update** - A site and mining-right specific Environmental Management Programme (EMPr) amendment and update to accommodate the develop of a new shaft complex at the mine.
- **Steyn City – Construction Phase EMPr** - A site specific Environmental Management Programme (EMPr) was developed specifically for the construction phase of Steyn City; a mixed use development. The EMPr also caters for infrastructure installation within the development.
- **Northam Platinum - EMPr amendment and update** - A site and mining-right specific Environmental Management Programme (EMPr) amendment and update to accommodate the expansion of the mining-rights area for Northam Platinum Mine.

Relevant ECO and Auditing Project Experience (more detail available on request)

- **Gauteng Department of Roads and Transport (GDRT) Road K46.** Lead Auditor. Water Use License (WUL) Compliance Audit.
- **SANRAL - The upgrade of National Route 3 (N3), Section 3, from Gladys Manzi road to New England road interchange. 2024 – ongoing.** Lead Auditor. Environmental Control Officer. Prism EMS was appointed to conduct the required Audits and ECO services for the project. SANRAL is upgrading the N3 Section 3 between Murray Road (km 5.90) and the New England interchange (km 9), Pietermaritzburg, KwaZulu-Natal.
- **Fort Beaufort Wastewater Treatment Works and pumps stations** - a series of Performance Audits over three (3) years on a quarterly basis, in terms of the Court Order, 10 March 2023; GA Regulations, 2013 and the Engineering works programme, 2023. **2023-2024.** Lead Auditor.
- **Gauteng Department of Roads and Transport (GDRT) Road K46.** Lead Auditor. **2021-2024.** Monthly compliance audits and ECO services for the project.
- **Steyn City** - residential and lifestyle development ECO in Johannesburg (Gauteng Province) 2011-2024. Environmental Control Officer. Prism EMS was appointed to conduct the required ECO services for the Steyn City Residential and Lifestyle Development. The development is currently the largest 'green' development in South Africa and stringent requirements set by the Department of Water Affairs is to be complied with by the developer and its contractors. The reports are provided to the Department for perusal and comment. (Steyn City development).
- **Steyn City** - residential and lifestyle development **Water Use License Annual Audits** in Johannesburg (Gauteng Province) 2011-2024. Environmental Auditor. Prism EMS was appointed to conduct annual Water Use License Audits for the Steyn City Residential and Lifestyle Development. The development is currently the largest 'green' development in South Africa and stringent requirements set by the Department of Water Affairs is to be complied with by the developer and its contractors. The reports are provided to the Department for perusal and comment. (Steyn City development).
- **Steyn City** - residential and lifestyle development **Wastewater Annual Audits** in Johannesburg (Gauteng

Province) 2018-2024. Environmental Auditor. Prism EMS was appointed to conduct annual Wastewater Annual Audits for the Steyn City Residential and Lifestyle Development. The development is currently operating a secondary polishing plant to further treat and polish the treated wastewater from Northern Treatment Works.

- **Northam Platinum Mine Performance Assessment**, Northam (Limpopo Province) 2014-2022. Environmental Auditor. The Northam Platinum Mine has been operating for numerous years. As part of the mine's functioning, a number of environmental standards, licenses, permits and other requirements need to be complied with and include the EAs, EMPr and Water Use License. A detailed performance assessment in terms of the mine's compliance to such requirements was undertaken with another senior employee of the firm. The results were reported in a comprehensive performance assessment report. (Northam Platinum Mine).
- **Northam Platinum Mine Waste License Audit**, Northam (Limpopo Province) 2014-2022. Environmental Auditor. The Northam Platinum Mine has been operating for numerous years. As part of the mine's functioning, a number of environmental standards, licenses, permits and other requirements need to be complied with and include the Waste License. A detailed performance assessment in terms of the mine's compliance to the Waste Licence was undertaken with another senior employee of the firm. The results were reported in a comprehensive performance assessment report. (Northam Platinum Mine).
- **East Bank Siding – Baseline Contamination Audit**, Istofield (Pty) Ltd has a lease with Transnet Freight Rail (TFR) which will allow them to utilize the existing Oosbank Siding in Mpumalanga for the purpose of stockpiling and loading coal. A Baseline Contamination Audit was undertaken to give a high-level understanding of the possible contamination on site.
- **Northam Platinum Mine DMR Audit**, Northam (Limpopo Province) 2019. Environmental Auditor. The Northam Platinum Mine has been operating for numerous years. As part of the mine's functioning, a number of environmental standards, licenses, permits and other requirements need to be complied with and include the requirements of the MPRDA. A detailed audit in terms of the mine's compliance to the MPRDA and Mine's EMPr was undertaken.
- **Rand Park Ridge Ext 105** - Residential development ECO in Johannesburg (Gauteng Province) 2017-2018. Environmental Control Officer. Prism EMS was appointed to conduct the required ECO services for the Rand Park Ridge Ext 105 Residential Development. The reports are provided to the Departments for perusal and comment.
- **Bergbron Ext 14** - Residential development ECO in Johannesburg (Gauteng Province) 2017-2018. Environmental Control Officer. Prism EMS was appointed to conduct the required ECO services for the Bergbron Ext 14 Residential Development. The reports are provided to the Departments for perusal and comment.
- **Sunninghill Ext 168** - Residential development ECO in Johannesburg (Gauteng Province) 2017-2018. Environmental Control Officer. Prism EMS was appointed to conduct the required ECO services for the Sunninghill Ext 168 Residential Development. The reports are provided to the Departments for perusal and comment.
- **Laser Park Ext 32** - Commercial development Environmental Authorisation (EA) Audits in Johannesburg (Gauteng Province) 2016. Environmental Auditor. Prism EMS was appointed to conduct the Environmental Authorisation (EA) Audit for the Laser Park Ext 32 Development. The reports are provided to the GDARD for perusal and comment.
- **Khumani Iron Ore Mine Performance Assessment**, Kathu (Northern Cape Province) 2014. Environmental Auditor. The Khumani Iron Ore Mine has been operating for numerous years. As part of the mine's functioning, a number of environmental standards, licenses, permits and other requirements need to be complied with and include the EAs, EMPr and Water Use License. A detailed performance assessment in terms of the mine's compliance to such requirements was undertaken with another senior employee of the firm. The results were reported in a comprehensive performance assessment report. (Khumani Iron Ore Mine).
- **Ferrero Environmental Compliance Determinations**, Midvaal (Gauteng Province) 2014. Environmental Assessor. Tasked to conduct quarterly environmental compliance audits to determine actual client compliance to environmental performance standards and overall legislative requirements. (Imsofer South Africa).
- **Macsteel Environmental Legal Compliance Audit**, Boksburg (Gauteng Province) 2013. Environmental Auditor. Tasked to conduct environmental compliance audits to determine actual client compliance to environmental performance standards and overall legislative requirements. (Macsteel - South Africa).

Environmental Legal Experience (more detail available on request)

Mr Botha has concluded on several section 24G rectification applications in respect of illegal activities that has commenced prior to authorisation under the NEMA. Several other legal notice response and applications were also dealt with over the past few years. Some include coastal protection notices etc.

A short non-descriptive list is provided due to the legal nature of the applications.

- K46 Road (Erling to Main Road) – Current
- Eva-last - Current
- Grace Trinity School for Girls - Current
- St Declans School for Boys – Current
- Erf 66 Highlands – High Court
- Crown Ext 10 - WUL
- 62 Austin Road
- 7x Wilderness NEM ICM
- Halewood International
- Plot 59 Bredell AH
- Plot 1, 2 and 3 Marister AH
- Avlon School
- Cycle Park- WUL
- Sunninghill School - WUL
- 210 Kimbult - WUL
- Portion 53 Rietvlei 101
- Quantus Foundry – AEL
- Tantalite Resources – AEL
- Consol Clayville – AEL

SPECIALIST SURVEYS**Golden Mole Surveys/Assessments:**

- Holding 76 Olympus, 2024
- Portion 331 Tiegerpoort 371-JR, 2024
- Portion 192 Tiegerpoort 371-JR, 2024
- Portion 183 Zwavelpoort 373 JR, 2024
- Portion 206 Zwavelpoort - Bronberg PA, 2024
- Shere Ext 3, 2024
- 16 Catherine Rd, Shere, 2024
- Portion 38 Rietfontein 395 JR, 2024
- Remainder Holding 101 Shere AH, 2024
- 16 Catherine Rd, Shere AH, 2024
- Remainder Holding 84 Olympus AH, 2023
- Portion 349 The Willows, 2023
- Portion 895 Zwavelpoort 373 JR, 2023
- Camel Valley Development, 2022
- Portion 694 Zwavelpoort 373 JR, 2022
- Holding 40 Struben Rd, Shere AH, 2022
- Rand Water R5 Pipeline in the Bronberg Conservancy, Specialist Auditor, 2017-2022;
- Holding 72 Olympus AH, 2016
- **Bronberg Biodiversity Management Plan (Juliana's Golden Mole)**
- Portions 25, 26, 28 and 29 of The Shere AH
- Rand Water Pipeline - Bronberg Conservancy, Shere AH and Olympus Small Holdings
- Willows Quarry, Bronberg
- Shere Development
- Farm Hermansburg 495 KT – Transvaal Group Mines
- Portion 161 The Willows 340 JR

- Portion 162 The Willows 340 JR
- Valley Farm 397 JR
- Buffelskloof 382 KT

Hydropedological Assessments:

- Portions 188 & 189 Rietfontein 189IQ
- Greengate Ext 127
- Greengate Ext 100-106, 2021
- Steyn City – Rehabilitation and mitigation, 2021
- Strubensvalley Ext 24, 2021
- Kevin Ridge Ext 39, 2020
- Kevin Ridge Ext 36, 2020

Wetland Assessments:

- Roodepan, Kimberley, 2024
- Ngoako Modiba Park, Kimberley, 2024
- Portions 188 & 189 Rietfontein 189IQ, 2024
- N1 Murrayhill, Solar charging site, 2023
- Greengate Ext 127, 2023
- Homes Haven Ext 52, 2023
- Laser Park Ext 39, 2023
- Greengate Ext 80, 2023
- Portion 84&301 Rietfontein 189 IQ - Eva last, 2022
- Portion 41 Onderstepoort 266 JR, 2022
- Portion 1 of Holding 269 Chartwell AH, 2022
- Ekandustria, 2022
- Leeuwnfontein Residential development, 2022
- Aries - Upington 400kv Line, ESKOM, 2022
- Orkney, Agricultural and dam relocation project, 2022
- Greengate Ext 100-106, 2021
- Trac N4, R539 Schoemanskloof Road Upgrade – Borrow Pits, 2021
- Lanseria Medical Waste Facility, Lanseria Corporate Estate, 2021
- Eagle's Nest Ext 9, 2021
- Greengate Ext 100-106, 2021
- Trac N4, R539 Schoemanskloof Road Upgrade, 2020
- Farm Onspoed 500 JR (Portion 28), Prospecting Rights Application, 2020
- Ptn 260 Rietfontein, 2020
- Eskom, Villiers – Widfield – Wetland Audit, 2020
- Little Falls Ext 21, 2020
- Trac N4, Schoemanskloof Upgrade, 2020
- Homes Haven Ext 48, 2020
- Witpoortjie Ext 80, 2020
- Trac N4, Montrose Interchange, 2019
- Needwood, 2019
- Eskom, Porcupine Park re-alignment, 2019
- Erf 580 Glenanda, 2019
- Afrimat Silica, 2019
- Crown Ext 10, 2019
- Vulindlela Bridge Repair, 2019

Aquatic Assessments:

- SANRAL, Woodhouse bridge, 2024
- ESKOM, Santiago to Kimelberg distribution line, 2024
- Olwazini, Netbank, 2023
- Aries - Upington 400kv Line, ESKOM, 2022
- Trac N4, R539 Schoemanskloof Road Upgrade – Borrow Pits, 2021
- Trac N4, R539 Schoemanskloof Road Upgrade, 2020
- Trac N4, Montrose Interchange, 2019
- Crown Ext 10 & 25, 2019
- Sunninghill Ext 168, 2016;
- Happy Island Water Park, 2016;
- Eskom, Rustenburg, North West Province, 2015;
- Steyn City, Johannesburg, Gauteng, 2015;
- Nederburg, Paarl, Western Cape, 2014;
- The Reeds, Johannesburg, Gauteng, 2014;
- Elias Motsoaledi, Soweto, Gauteng, 2014;
- K6 – Provincial Road, Pretoria, Gauteng, 2013;

Biodiversity Assessments:

- SANRAL, Woodhouse bridge, 2024
- ESKOM, Santiago to Kimelberg distribution line, 2024
- Roodepan, Kimberley, 2024
- Ngoako Modiba Park, Kimberley, 2024
- Portions 188 & 189 Rietfontein 189IQ, 2024
- N1 Murrayhill, Solar charging site, 2023
- Greengate Ext 127, 2023
- Greengate Ext 80, 2023
- Portion 84&301 Rietfontein189 IQ - Eva last, 2022
- Portion 41 Onderstepoort 266 JR, 2022
- Aries - Upington 400kv Line, ESKOM, 2022
- Greengate Ext 100-106, 2021
- Trac N4, R539 Schoemanskloof Road Upgrade – Borrow Pits, 2021
- Greengate Ext 100-106, 2021
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Air Quality Projects:

- Manganese Dioxide Plant, Coega, Eastern Cape, 2024; Air Emissions License (AEL)
- Northam Platinum, North West, 2021; Air Emissions License (AEL) Audit
- Westmill, 2021, Air Quality Specialist Assessment (inclusive of modelling)
- Northam Platinum, North West, 2020; Air Emissions License (AEL) Audit
- South32, Wolwekrans; 2019; Air Quality Specialist Assessment
- Steyn City Gas Storage, 2019; Air Emissions License (AEL) Audit
- The Melt Shop, 2018; Air Emissions License (AEL)
- The Melt Shop, 2018; Air Quality Specialist Assessment (inclusive of modelling)
- Coega Tank Farm, 2018; Air Emissions License (AEL)
- Coega Tank Farm, 2018; Air Quality Specialist Assessment (inclusive of modelling)
- Maroeloesfontein Andalusite Mine, North West, 2017-2019; Dust fallout monitoring