



In association with **SKYSIDE SOUTH AFRICA**



**Report: Monthly Dust Deposition Monitoring  
January 2026**

Prepared for

**RICHARDS BAY CLEAN AIR ASSOCIATION**

**TEST REPORT: AS1751 46.069**

**15 January 2026**



T0701



info@skyside.co.za | +27 (31) 100 – 1300  
 Unit 2, Building 4, Ninian Westmead Estate, 33 Henry Pennington Road, Pinetown  
 PO Box 1726, Westville, Durban, 3630  
 Skyside (Pty) Ltd 2014/276266/07  
 Director: Q Hurt

info@skyside.co.za | +27 (21) 300 8705  
 17 Bay View Street, Saldanha Bay  
 PO Box 1726, Westville, Durban, 3630  
 Skyside (Pty) Ltd 2014/276266/07  
 Director: Q Hurt



info@equity.earth | +27 (11) 590 300  
 2 Samantha Street, Strydompark, Randburg, 2169  
 PO Box 1726, Westville, Durban, 3630  
 Equity Earth (Pty) Ltd 2017/067973/07  
 Director: Q Hurt, M.N.A. Mbanjwa

<b>Customer:</b>	Richards Bay Clean Air Association
<b>Project Contact:</b>	Sandy Camminga <a href="mailto:Sandy@rbcaa.org.za">Sandy@rbcaa.org.za</a> T: +27 (35) 786 0076
<b>Site:</b>	Richards Bay Clean Air Association
<b>Date of Sampling:</b>	05 December 2025 – 06 January 2026
<b>Date of Laboratory Analysis:</b>	13 January 2026
<b>Date of Report:</b>	15 January 2026
<b>Report Reference:</b>	AS1751 46.069

**Report Compiled By:** Lefu Mokoena  
**Designation:** Junior Reporting Specialist  
**Signature:**

**Report Authorised By:** Caylee Ellero  
**Designation:** Technical Signatory  
**Signature:**

*The Technical Signatory hereby declares that, to the best of his/her knowledge, the analytical data was checked for completeness, the results presented in this report are accurate and legible, and analysis was conducted in accordance with the methods in the approved protocol.*

**Disclaimer:**

1. Sampling was conducted by the SKYSIDE (South Africa) team under supervision of SKYSIDE Technical Signatories.
2. The results contained in this report relate only to the streams tested and to the conditions prevalent during such tests.
3. In certain instances, generally identified, SKYSIDE relied on information provided by third parties. It was not possible to verify all such information independently.
4. The report includes the most pertinent calibration evidence and field data, but further traceability and similar data not considered immediately relevant is available at SKYSIDE offices if required. Signed calibration certificates are available on request.
5. This test report may not be reproduced except in full.
6. SKYSIDE is accredited for compliance with ISO/IEC 17025:2017.
7. Results marked "Not SANAS Accredited" or otherwise marked with # in this report are not included in the SANAS Scope of Accreditation for SKYSIDE.
8. Opinions and interpretations expressed herein are outside the scope of SANAS accreditation.
9. Results marked "Subcontracted Test" or otherwise marked with § in this report are not included in the SANAS Scope of Accreditation for SKYSIDE.

Based on AQS-QLT-REP-002 Rev 06  
 Date: 14 October 2025

# Table of Contents

1	INTRODUCTION.....	4
1.1	Scope of Work .....	4
1.2	Glossary / Abbreviations.....	4
2	METHODOLOGY .....	5
3	STANDARDS FOR DUST DEPOSITION .....	6
3.1	National Environmental Management: Air Quality Act, 2004; (Act No. 39 of 2004) National Dust Control Regulations.....	6
3.2	Residential and non-residential areas .....	6
4	RESULTS .....	7
4.1	Operational Aspects .....	7
4.2	Single Bucket Results .....	7
4.3	Exceedance Reporting .....	8
4.4	Meteorological Data .....	9
5	CONCLUSION .....	10
6	APPENDICES.....	11
6.1	Appendix 1: Results .....	11
6.2	Appendix 2: Sampling Locations.....	13
6.3	Appendix 3: Non-Exceedance Filters .....	14

# 1 INTRODUCTION

## 1.1 Scope of Work

SKYSIDE South Africa’s understanding of the scope of work at Richards Bay Clean Air Association is as follows:

- SKYSIDE SA changes dust samples on a monthly basis.
- Gravimetric analysis of dust samples by SKYSIDE SA on a monthly basis.
- Reporting of results.

The dust deposition monitoring was based on the ASTM International standard method for collection and analysis of dustfall (ASTM D1739), with certain modifications.

The results presented in this report are compared to the South African National Dust Control Regulation, 2013.

## 1.2 Glossary / Abbreviations

Measurement Units	
<b>L</b>	Litres
<b>m</b>	Metres
<b>mg/m<sup>2</sup>/day</b>	Milligrams per metre squared per day
<b>ml</b>	Millilitres
<b>mm</b>	Millimetres

Other	
<b>ISO 17025</b>	International Standard: General requirements for the competence of testing and calibration laboratories.
<b>SANAS</b>	South African National Accreditation System, established by Section 3 of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006.

## 2 METHODOLOGY

Dustfall monitoring at Richards Bay Clean Air Association began in September 2023. Windblown settleable dust fall-out is monitored based on the ASTM International standard method for collection and analysis of Dustfall (ASTM D1739), with certain modifications. This method employs a simple device consisting of a cylindrical 5 L container half-filled with deionised water exposed for one calendar month ( $30 \pm 3$  days). The water is treated with an inorganic algaecide to prevent algal growth in the buckets. The reagent used for this is a 5 % copper sulphate solution.



*Figure 1: Single bucket monitoring unit, showing a sampling bucket with bird ring and security clamp.*

The bucket stand comprises a ring that is raised above the rim of the bucket to prevent contamination from perching birds (Figure 1). The bucket holder is connected to a 2.1 m galvanised steel pole, which is either directly attached to a fence post or can be attached to a galvanised steel base plate, which is buried to a depth of 500 mm. This allows for a variety of placement options for the fallout samplers. Exposed buckets, when returned to the SKYSIDE SA laboratories, are rinsed with deionised water to remove residue from the sides of the bucket, and the bucket contents filtered through a 1 mm sieve to remove insects and other coarse organic detritus. The sample is then filtered through a pre-weighed paper filter to remove the insoluble fraction, or dust fallout. This residue and filter are dried, and gravimetrically analysed to determine the insoluble fraction (dust fallout).

### 3 STANDARDS FOR DUST DEPOSITION

#### 3.1 National Environmental Management: Air Quality Act, 2004; (Act No. 39 of 2004) National Dust Control Regulations

Table 3: Extract from the National Dust Control Regulations, No. 36974 Government Gazette, 1 November 2013

Restriction Areas	Dust fall rate (D) (mg/m <sup>2</sup> /day, 30-days average)	Permitted frequency of exceeding dust fall rate
Residential area	D < 600	Two within a year, not sequential months
Non-residential area	600 < D < 1200	

The method to be used for measuring Dust fall rate and the guideline for locating sampling points shall be ASTM D1739, or equivalent method approved by any internationally recognized body.

#### 3.2 Residential and non-residential areas

A residential area means any area classified for residential use in terms of local town planning scheme.

A non-residential area means any area not classified for residential use as per local town planning scheme.

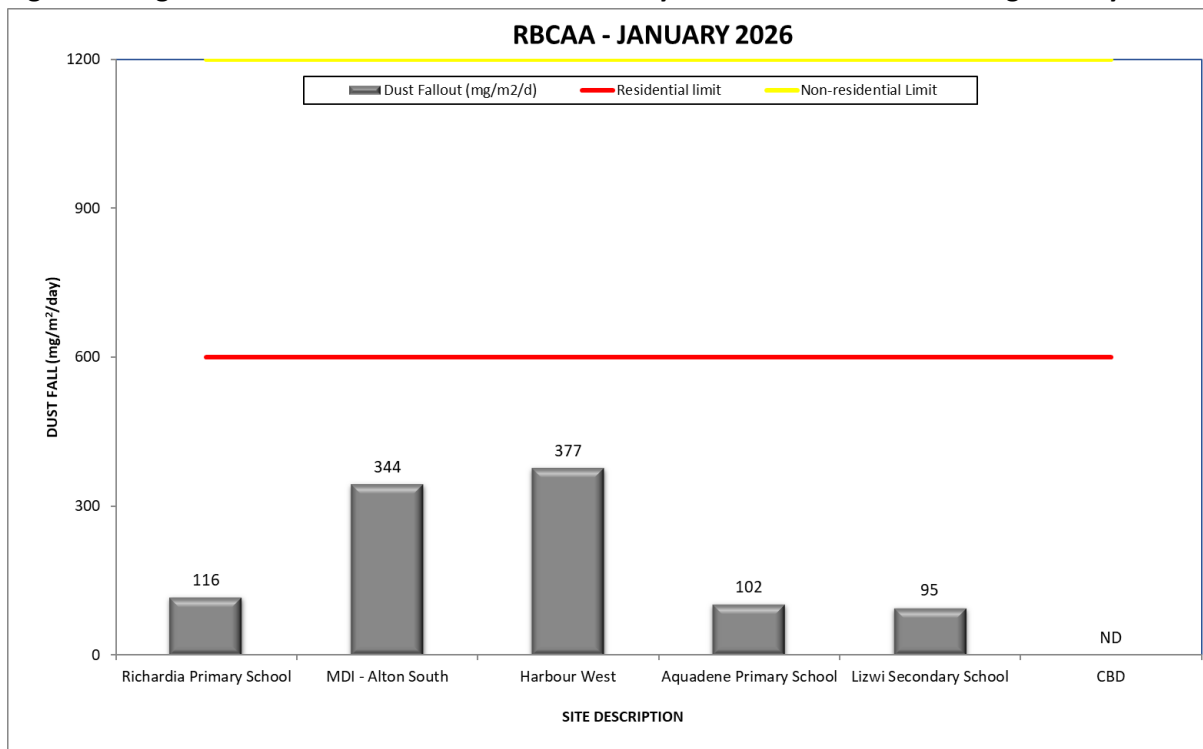
## 4 RESULTS

### 4.1 Operational Aspects

The sampling was 05 December 2025 – 06 January 2026. Samples were exposed for 32 days; this exposure period complies with the standard operating procedure of  $30 \pm 3$  days. Site 06 (CBD) was contaminated with organic matter, and a valid sample return of 83% was achieved for single buckets.

### 4.2 Single Bucket Results

**Figure 2: Single bucket dustfall results for Richards Bay Clean Air Association during January 2026**



ND – No data (Sample was contaminated)

- During the monitoring period in review, Site 03 (Harbour West) recorded the highest dustfall with a rate of 377 mg/m<sup>2</sup>/day.
- Site 05 (Lizwi Secondary School) recorded the lowest dustfall with a rate of 95 mg/m<sup>2</sup>/day.
- Site 06 (CBD) recorded no data as the sample was contaminated with organic matter.

### 4.3 Exceedance Reporting

The table below provides information on exceedances for February 2025 to January 2026.

*Table 4.3.1: Exceedances for February 2025 to January 2026*

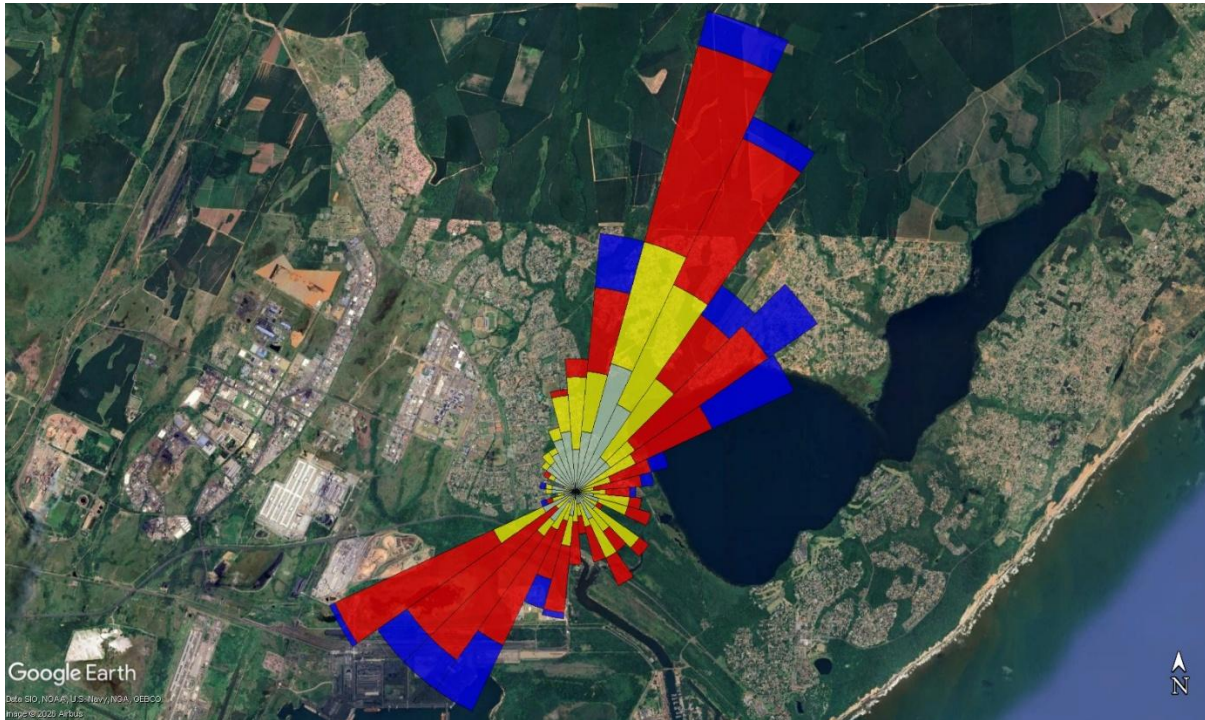
Period	Number of sites that have exceeded dust fall limits	Site Description
Current month	---	---
Previous 11 months	3	Site 06 (CBD) (1) – June 2025 Site 03 (Harbour West) (3) – February, June & July 2025 Site 04 (Aquadene Primary School) (2) – June & July 2025
Consecutive months	2	Site 03 (Harbour West) - (1) – June - July 2025 Site 04 (Aquadene Primary School) (1) – June - July 2025

Please note that compliance with respect to the National Dust Control Regulations is provisional as the site classifications in terms of these regulations will need to be confirmed by the client by considering the town planning of the area of operation.

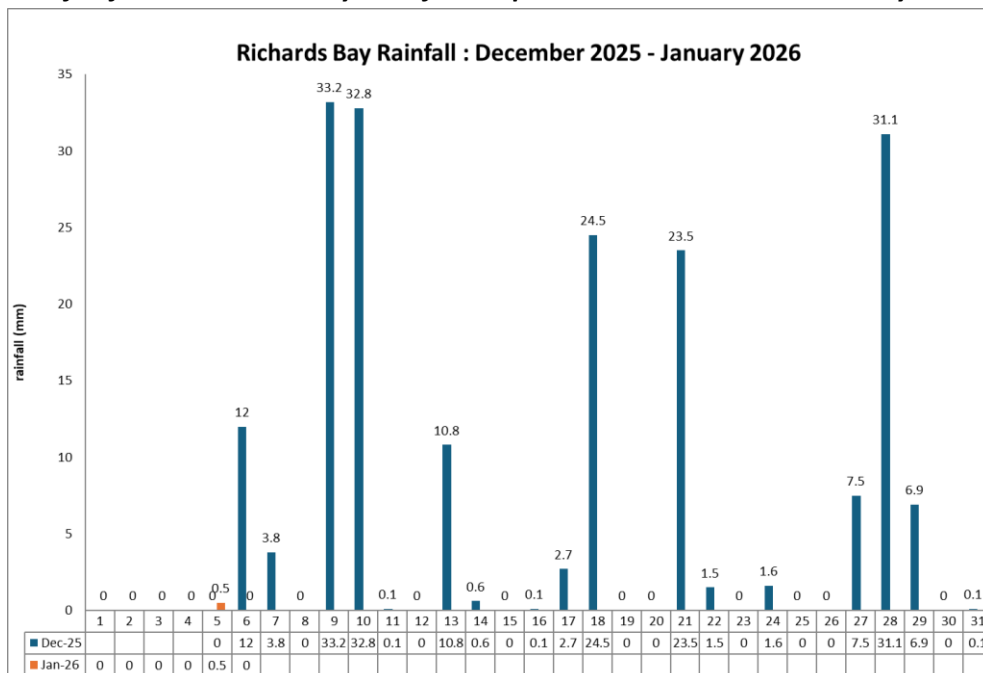
#### 4.4 Meteorological Data

SKYSIDE SA is not accredited for the acquisition and reporting of meteorological data. The data has been provided by Richards Bay Clean Air Association at the Arboretum Weather Station. SKYSIDE SA will not take responsibility for any errors that may occur in the acquisition and transmission of data.

**Figure 3: Wind rose in Google Earth depicting the wind profile for the period 05 December 2025 – 06 January 2026**



**Figure 4: Rainfall for the Richards Bay area for the period December 2025 – January 2026**



## **5 CONCLUSION**

During the monitoring period in review, all the NON-RESIDENTIAL sites recorded dust fall rates within the NON-RESIDENTIAL threshold; this is acceptable in terms of the National Dustfall Regulations. Site 06 (CBD) was contaminated with organic matter.

During the monitoring period in review, all the RESIDENTIAL sites recorded dust falls within the RESIDENTIAL threshold. This is acceptable in terms of the National Dustfall Regulations.

## 6 APPENDICES

### 6.1 Appendix 1: Results

RICHARDS BAY CLEAN AIR ASSOCIATION DUSTFALL MONITORING			Month: January 2026 Sampling period: 05 December 2025 – 06 January 2026		
SITE DESCRIPTION	SITE CLASSIFICATION	FILTER No.	NETT MASS (mg)	No. DAYS	DUST FALLOUT (mg/m <sup>2</sup> /day)
Richardia Primary School	RESIDENTIAL	DA 091	84	32	116
MDI - Alton South	NON-RESIDENTIAL	DA 096	250	32	344
Harbour West	NON-RESIDENTIAL	DA 092	274	32	377
Aquadene Primary School	RESIDENTIAL	DA 093	74	32	102
Lizwi Secondary School	RESIDENTIAL	DA 089	69	32	95
CBD	RESIDENTIAL	DA 085	ND	32	ND

ND – No data due to the sample being contaminated with organic matter.

Please note that compliance with respect to the National Dust Control Regulations is provisional as the site classifications in terms of these regulations will need to be confirmed by the client by considering the town planning of the area of operation.

Specific Test Conditions	Samples stored at room temperature prior to analysis. Filters weighed at constant mass
Deviations from Method	None
Measurement Uncertainty	± 5%

**Table 1. Dust fall recorded at Richard’s Bay Clean Air Association’s single bucket sites for the period February 2025 – January 2026**

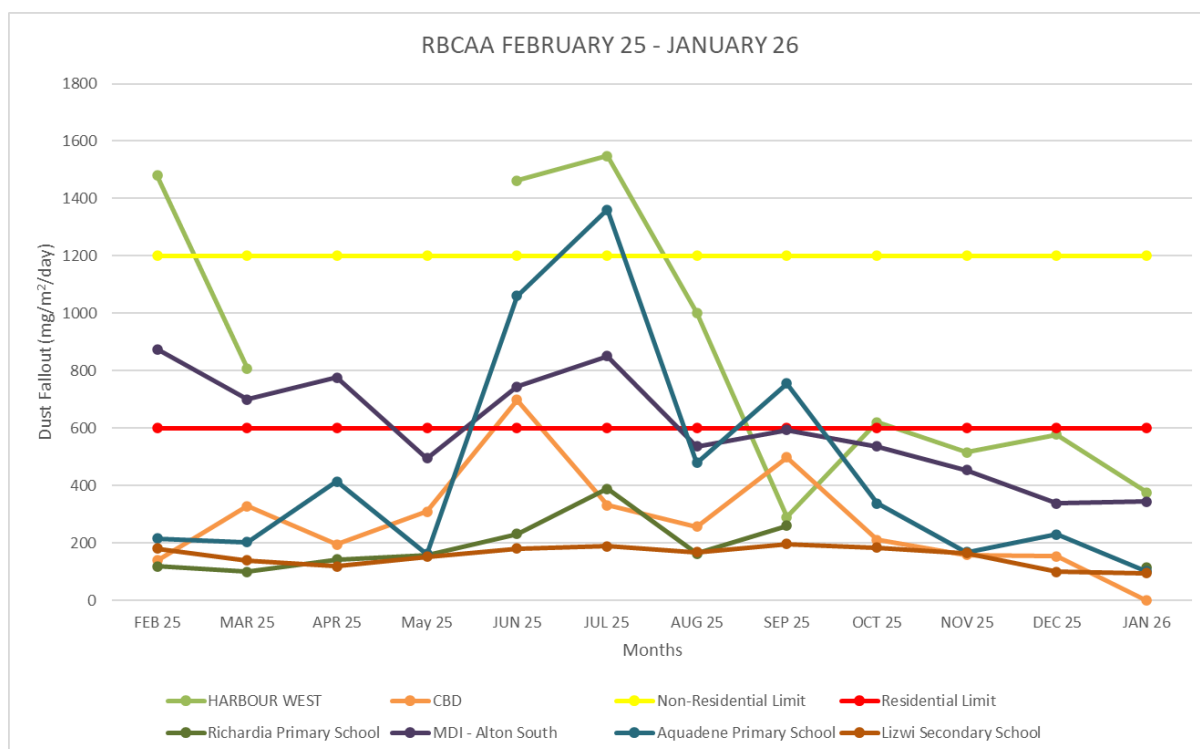
Site	SITE 01	SITE 02	SITE 03	SITE 04	SITE 05	SITE 06
Month	Richardia Primary School	MDI - Alton South	Harbour West	Aquadene Primary School	Lizwi Secondary School	CBD
FEB 25	120	875	1480	215	182	140
MAR 25	101	701	808	204	140	329
APR 25	143	777	ND	415	119	196
MAY 25	157	496	ND	162	153	310
JUN 25	232	745	1463	1061	181	699
JUL 25	390	851	1549	1361	189	332
AUG 25	163	537	1002	479	168	258
SEP 25	260	594	290	756	197	498
OCT 25	ND	537	621	338	185	212
NOV 25	ND	455	517	168	166	159
DEC 25	ND	339	578	230	101	154
JAN 26	116	344	377	102	95	ND

**BOLD YELLOW** – Non-Residential Exceedance

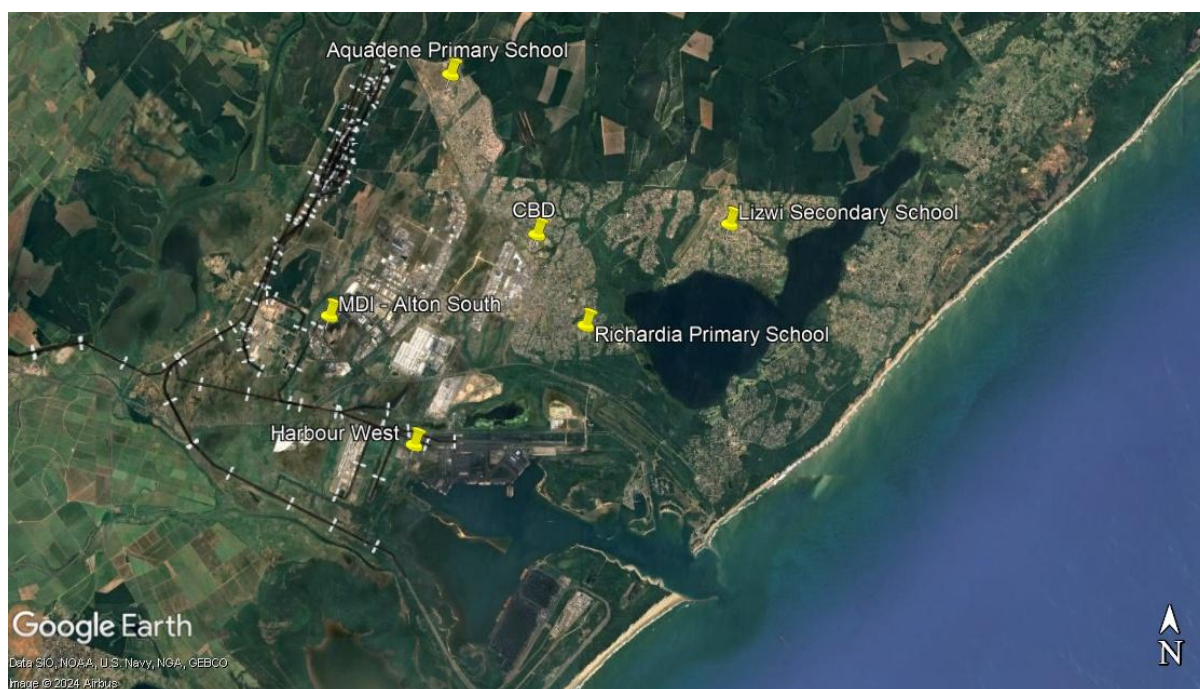
**BOLD RED** – Residential Exceedance

ND – No data due to the sample being contaminated with organic matter.

**Figure 5. Dust fall recorded at Richard’s Bay Clean Air Association’s single bucket sites for the period February 2025 – January 2026**








## 6.2 Appendix 2: Sampling Locations









SITE DESCRIPTION	LATITUDE	LONGITUDE
Richardia Primary School	28 45' 46.5"S	32 03' 58.1" E
MDI - Alton South	28 45' 41.2"S	32 00' 26.2" E
Harbour West	28°47'14"S	32° 1'37"E
Aquadene Primary School	28 42' 45.9"S	32 02' 04.6" E
Lizwi Secondary School	28 44' 32.2"S	32 05' 56.2" E
CBD	28°44'41"S	32°3'17"E

### 6.3 Appendix 3: Non-Exceedance Filters

	
<p>SITE 01 – Richardia Primary School – 116 mg/m<sup>2</sup>/day</p>	<p>SITE 02 - MDI - Alton South – 334 mg/m<sup>2</sup>/day</p>
	
<p>SITE 03 - Harbour West – 377 mg/m<sup>2</sup>/day</p>	<p>SITE 04 - Aquadene Primary School – 102 mg/m<sup>2</sup>/day</p>
	
<p>SITE 05 - Lizwi Secondary School – 95 mg/m<sup>2</sup>/day</p>	

### 6.4 Appendix 4: Bucket Images

	
<p>SITE 01 – Richardia Primary School</p>	<p>SITE 02 – MDI-Alton South</p>
	
<p>SITE 03 – Harbour West</p>	<p>SITE 04 – Aquadene Primary School</p>
	
<p>SITE 05 – Lizwi Secondary School</p>	<p>SITE 06 – CBD – Contaminated</p>