DECEMBER DUST MONITORING REPORT
CONCRUSH FACILITY, TERALBA

Prepared for CONCRUSH PTY LTD

Prepared by RCA Australia

RCA ref 13001a-408/0

FEBRUARY 2021

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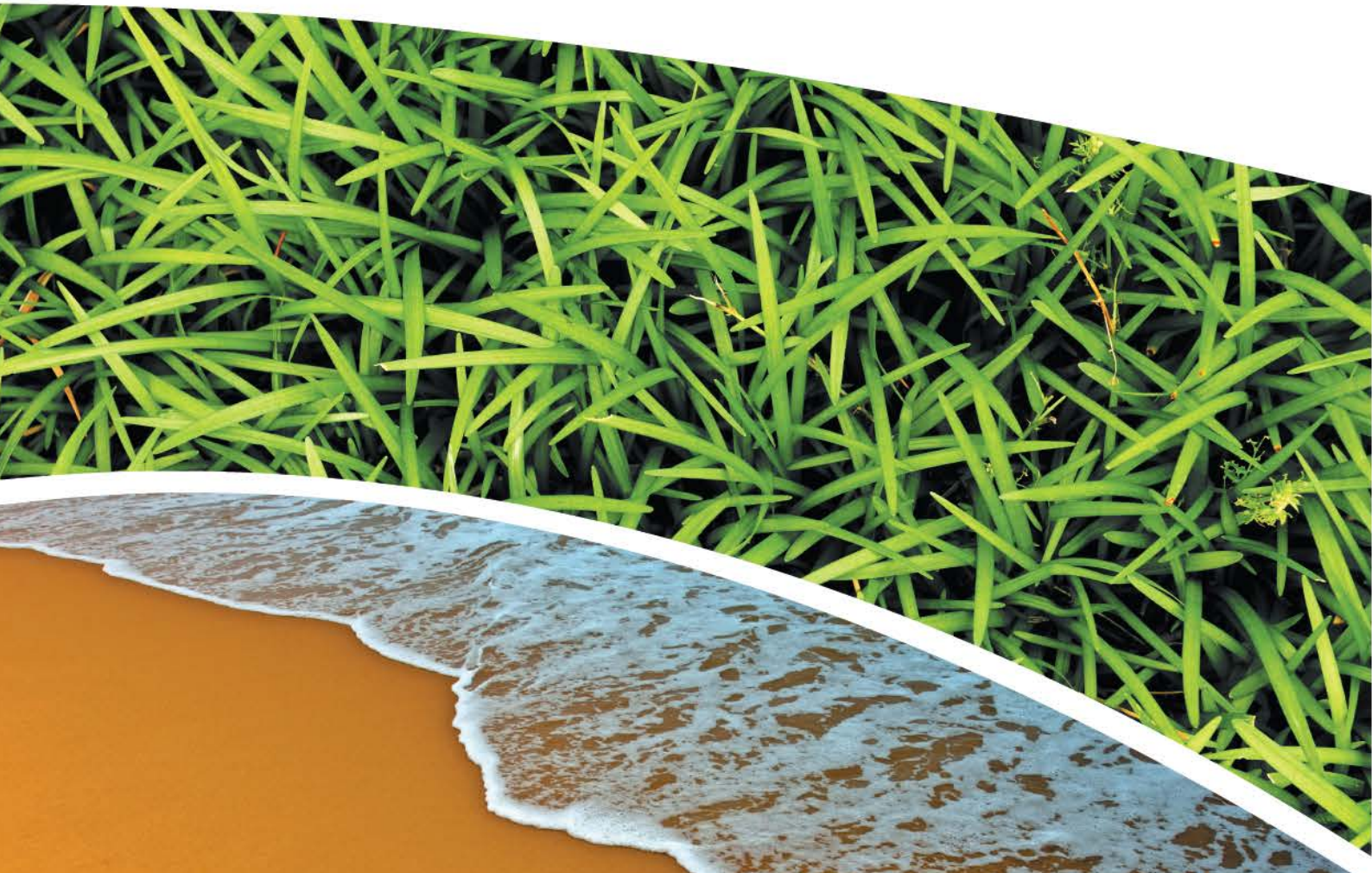
GEOTECHNICAL • ENVIRONMENTAL



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GEOTECHNICAL • ENVIRONMENTAL

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Environmental Engineering
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Environmental Monitoring
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Occupational Hygiene

1 February 2021

Concrush Pty Ltd
21 Racecourse Road
Teralba NSW 2284

Attention: Mr Kevin Thompson

DECEMBER DUST MONITORING REPORT
CONCRUSH FACILITY, TERALBA

1 INTRODUCTION

This report presents the findings of dust monitoring undertaken at the Concrush resource recovery facility, situated in Teralba.

The site is an operational facility over approximately half of the monitored area; the remainder of the site is currently vacant land and has been approved for an expansion to the operations. At the time of site attendance there had been only minor works undertaken on the expansion component of the site comprising the removal of vegetation, grading of the site including placement of material, crushing of concrete identified within stockpiles on the site, and partial excavation of a proposed sediment basin.

The monitoring undertaken has been detailed in an Operational Air Quality Management Plan (OAQMP, Ref [1]) which has been submitted as part of the approval process.

2 SITE IDENTIFICATION AND DESCRIPTION

The site is described as at 21 Racecourse Road, Teralba and part Lot 2, DP 220347. Additional site details are shown in **Table 1** and the site extent is shown in **Figure 1** below.

Table 1 *Site Details*

Current zoning (Ref [2])	IN1 – General Industrial
Current and proposed use	Current: Existing Concrush facility and vacant/unused land within the proposed expansion area Proposed: Expanded Concrush facility over entire portion of site.
Size of site	Approximately 4.8ha (existing Concrush facility 2.4ha)
Surrounding land use to the: **North**	Lot 1 DP220347 Industrial – car wreckers operated by others.
South	Part of Lot 2 DP220347 Industrial – scrap metal recycling yard operated by others
East	Racecourse Road and then Cockle Creek
West	Main Northern Rail line and then wetlands
Nearest sensitive receptor (human health)	Residential housing located approximately 360m south east across Cockle Creek.
Nearest sensitive receptor (environmental)	Cockle Creek located approximately 35m east and wetland approximately 30m west

Figure 1 *Project Site Location and Layout*

3 MONITORING DETAILS

A total of four (4) monitoring locations are situated on site as shown in **Figure 2** below. At each of these locations there are two (2) dust depositional bottles situated on stands installed in accordance with the relevant Australian Standard (Ref [3]).

Figure 2 *Approximate Placement of Dust Deposition Gauges and Real Time Monitor.*

The 'B' gauges are managed by Concrush personnel to specifically monitor only the times that the Concrush facility is operational. This is achieved by placing a cover (plastic and steel) over the top of the funnel and bottle at the end of the Concrush operations (~4.30pm) and removing the cover at the commencement of the Concrush operations (~6.45am). A log of the adjustments has been kept for the month of December and this is included as **Appendix A**: it is noted that monitoring has not been facilitated on weekends, along with several days during the week. Based on the data provided, the 'B' gauges were not actively monitoring dust deposition for approximately 70% of the monitoring period.

The 'A' gauges are not adjusted by Concrush personnel and have continuously monitored the site for the full period between deployment and removal.

A real time dust monitor is situated on the southern portion of the roof of the office adjacent to the weigh station.

3.1 GUIDELINES

The NSW EPA guidelines (Ref [4]) nominates the criteria for depositional dust as detailed in **Table 2** below.

Table 2 *Depositional Dust: Impact Assessment Criteria*

Average Period	Maximum increase in deposited dust level	Maximum total deposited dust level	Sampling Frequency
Annual	2 g/m^2 /month	4 g/m^2/month	Monthly

The NSW EPA guidelines (Ref [4] nominate additional criteria:

- $PM_{2.5}$ daily average 0.025mg/m^3, annual average 0.008 mg/m^3
- PM_{10} daily average 0.05 mg/m^3, annual average 0.025 mg/m^3
- TSP_{annual} average 0.09 mg/m^3.

It is noted that there is no relevant Australian Standard for the methodology employed by the real time monitor, nor is the methodology included in the NSW EPA guidelines (Ref [5]); however, concentrations recorded by the real time monitor are considered appropriate for comparative purposes to trigger a review of dust control measures.

3.2 WEATHER

The real time dust monitor recorded conditions every five (5) minutes[1] continuously through until the end of the month. The monitor provides data with regards to wind direction and speed, air temperature, relative humidity and air pressure.

A summary of the December results is presented in **Table 3** below and **Figure 3**.

Table 3 *December Weather Summary Data*

	Maximum (date and time)	Minimum (date and time)
Wind Speed (m/s)	7.27 (1st December 7:15 p.m.)	0 (multiple occasions)
Air Temperature (^oC)	33.4 (27th December 3:25 p.m., 4:15 p.m.)	11.2 (9th December 2:55 a.m. to 3:05 a.m.)
Relative Humidity (%)	99.6 (22nd December 1:40 a.m.)	18.8 (6th December 4:50 p.m.)
Air Pressure (mBar)	1028.8 (12th December 8:55 a.m.)	998.8 (6th December 2:05 a.m.)

[1] Data was not recorded at midnight for any of the days within the monitoring period.

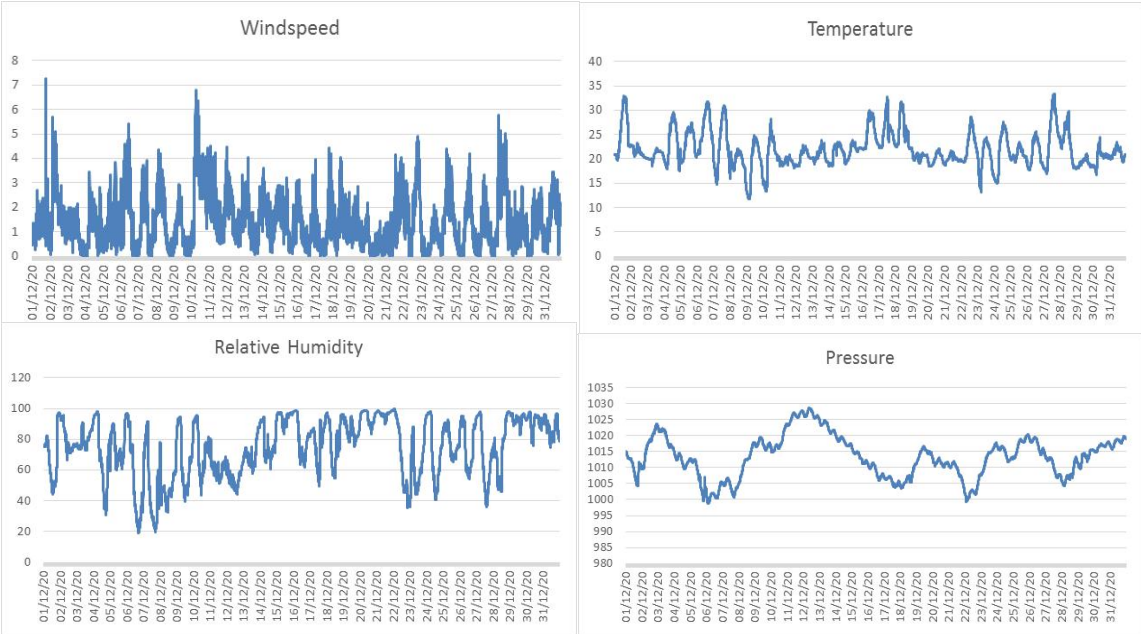

Figure 3 *Weather Summary 1st December – 31st December*

The wind speed was below the 5m/s (18km/h, Ref [1]) threshold for application of dust suppression measures for the majority of the monitoring period, with the exception of 60 occasions:

- 1st December multiple times in afternoon.
- 2nd December multiple times in morning.
- 6th December 3:05 p.m. and 3:15 p.m.
- 10th December multiple times in afternoon.
- 28th December multiple times in morning and afternoon.

The winds were predominantly from the south and south-south east with the highest winds from various directions. South-south east winds were recorded for approximately 13% and southerly winds were recorded for approximately 9.5% of the monitoring period. The wind rose for the monitoring period is shown as **Figure 4**.

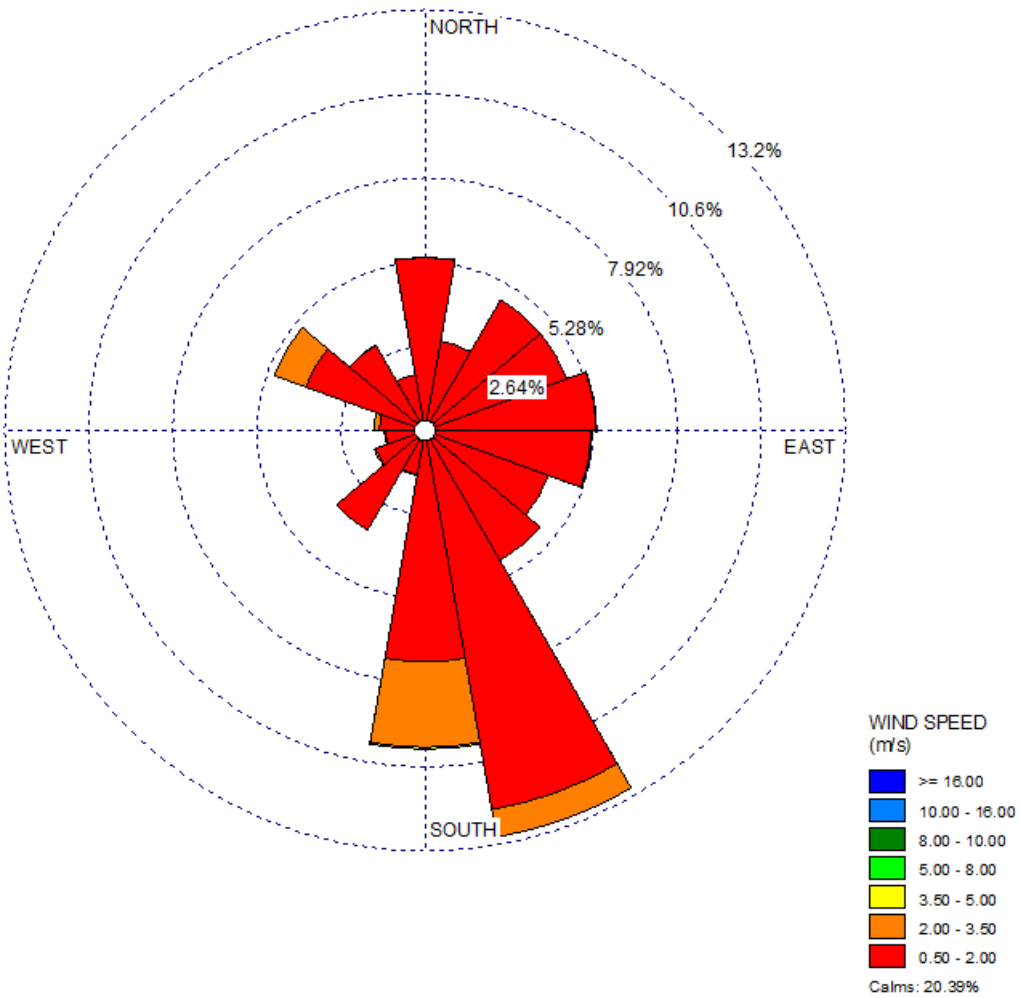

Figure 4 *Wind Rose 1st December – 31st December*

4 MONITORING RESULTS

4.1 DEPOSITIONAL DUST GAUGES

RCA collected the bottles from 7.25am to 8.10am on the 31st December 2020 which was the 31st day following the previous collection of the gauges on the 30th November 2020. All gauges were observed to be unbroken with the exception of DG1B which was observed to be broken when the gauge was removed from the stand, with the cover that has been used to cover the 'B' gauges was located at each of those gauges. The field sheet is included as **Appendix B**.

The results of the monitoring at each of the locations for this month is presented below in **Table 4**. Laboratory report sheets are included in **Appendix C**.

Table 4 *December Dust Monitoring Results*

	Water Volume (mL)	Insoluble Solids (g/m^2)	Ash (g/m^2)	Combustible Matter (g/m^2)
DG1A	2700	4.0	2.3	1.7
DG1B	Broken	-	-	-
DG2A	2150	0.1	0.1	<0.1
DG2B	750	0.9	0.8	0.1
DG3A	3150	3.0	2.4	0.6
DG3B	650	3.8	3.2	0.6
DG4A	3100	1.6	1.2	0.4
DG4B	1000	0.9	0.6	0.3

BOLD identifies where results of the 'A' gauges are in excess of annual average criterion (Ref [4]) which does not apply to individual results.

All concentrations of the 'A' gauges are below the annual average criterion (Ref [4]) should the concentrations be maintained at this level as shown on **Figure 5** below. There is insufficient data to be able to assess the results to the maximum increase criterion (Ref [4]). It is noted that, due to the adjustment occurring at the 'B' gauges, that it is not considered appropriate to compare the results to the criteria (Ref [4]).

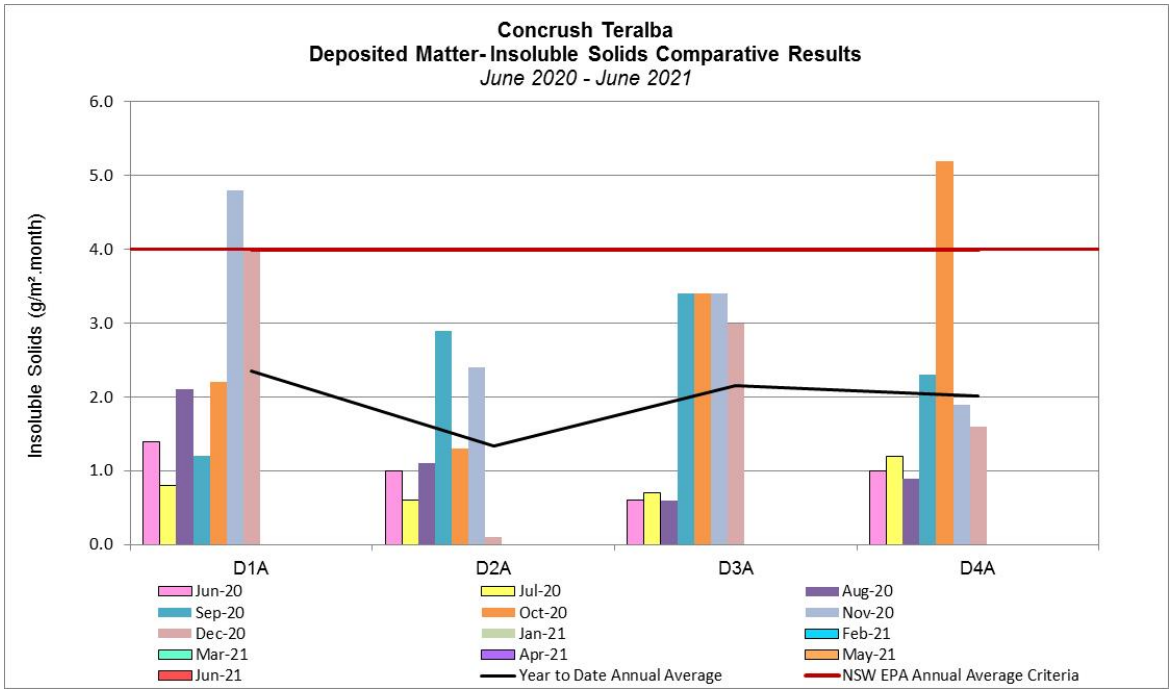

Figure 5 *Year to Date Dust Monitoring Results*

The water volume collected in the bottles indicates that the 'B' gauges have been monitoring for a lesser period that the 'A' gauges. The dust monitoring results from the 'B' gauges are generally below the 'A' gauges at each location with the exception of DG2B being higher than DG2A and DG3B being higher than DG3A. The reason for this is unknown however this has been an issue with the previous monitoring rounds.

The majority of detected insoluble solids are related to 'ash' which comprises non-combustible matter and would include the types of particles that may originate from the Concrush site however would also be present in dust from other sources. Some coal dust, such as may be originating from adjacent sites, may also remain in the 'ash' component of the sample.

It is noted that Concrush personnel have previously observed birds ('willy wagtails') using the gauges as baths and this may have had some impact on the water and dust content of the gauges.

4.2 REAL TIME DUST MONITOR

The real time dust monitor recorded conditions every five (5) minutes[2] continuously through until the end of the month. The monitor provides data with regards to $PM_{2.5}$, PM_{10} and PM_{total}. The PM_{total} concentration has been compared to the TSP annual average criterion.

A summary of the December results is presented in **Table 5** below and **Figure 6** below presents the $PM_{2.5}$ and PM_{10} data. Noting that the results have been not been obtained by a listed approved method for air quality (Ref [5]) and not considered directly comparable with criteria (Ref [4]):

- The daily average of $PM_{2.5}$ and PM_{10} are below the relevant criteria (Ref [4]).
- The annual average of the data for the period 1st December – 31st December is less than the relevant annual average criteria (Ref [4]) for $PM_{2.5}$ and PM_{total}, with PM_{10} being slightly above the annual average, noting that twelve (12) months of data is yet to be collected.

Table 5 *December Particle Summary Data*

	Maximum (date and time)	**Minimum (date and time)**	**Maximum Daily Average**
$PM_{2.5}$	0.146 (1st December 7.00 p.m.)	0 (multiple occasions)	0.015 (2nd December)
PM_{10}	1.82 (1st December 7.00 p.m.)	0 (15th December 4.00 a.m.)	**0.051** (11th December)
PM_{total}	2.139 (1st December 7.00 p.m.)	0 (15th December 4.00 a.m.)	0.061 (11th December)

BOLD identifies where results are in excess of criteria (Ref [4]).
Concentrations in mg/m^3

[2] Data was not recorded at midnight for any of the days within the monitoring period.

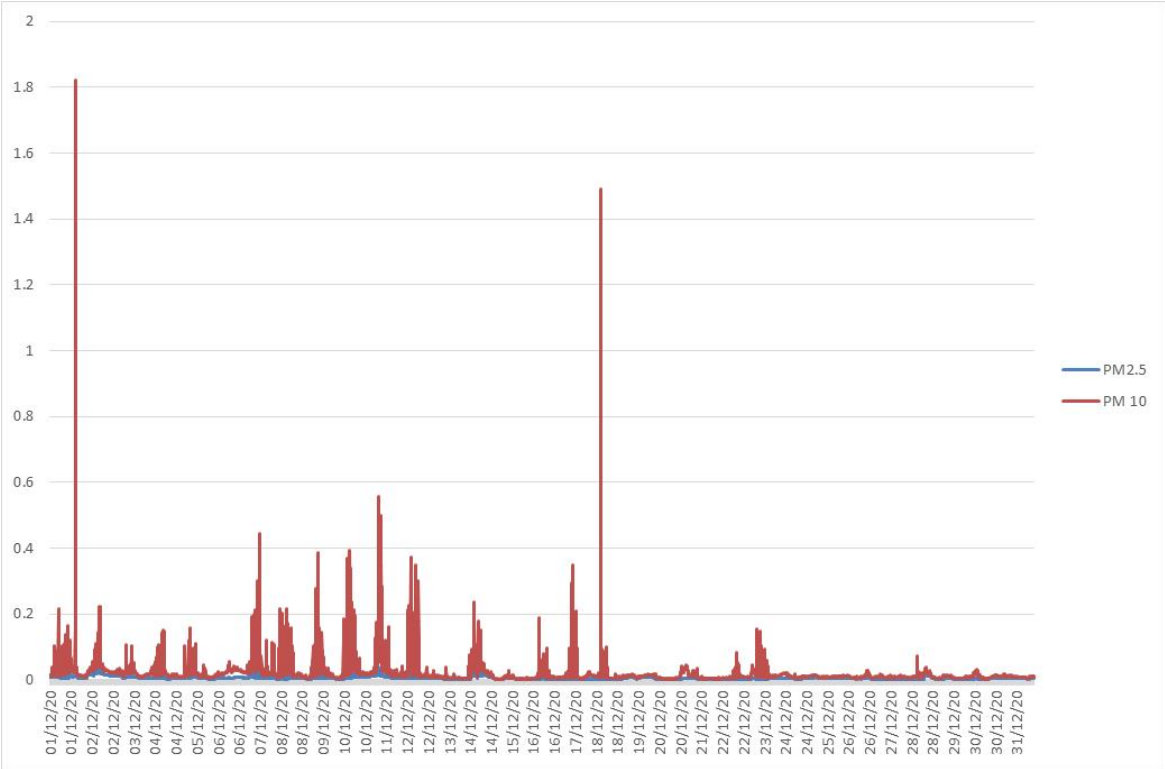

Figure 6 *$PM_{2.5}$ and PM_{10} 1st December to 31st December*

PM_{10} is the dominant particle size of those monitored by the real time monitor.

A summary of the December PM10 results in 15 minute increments is presented **Figure 7** noting that this increment correlates with the alarms set to notify Concrush of:

- PM10 >0.05 mg/m^3
- Wind speed >5m/s.

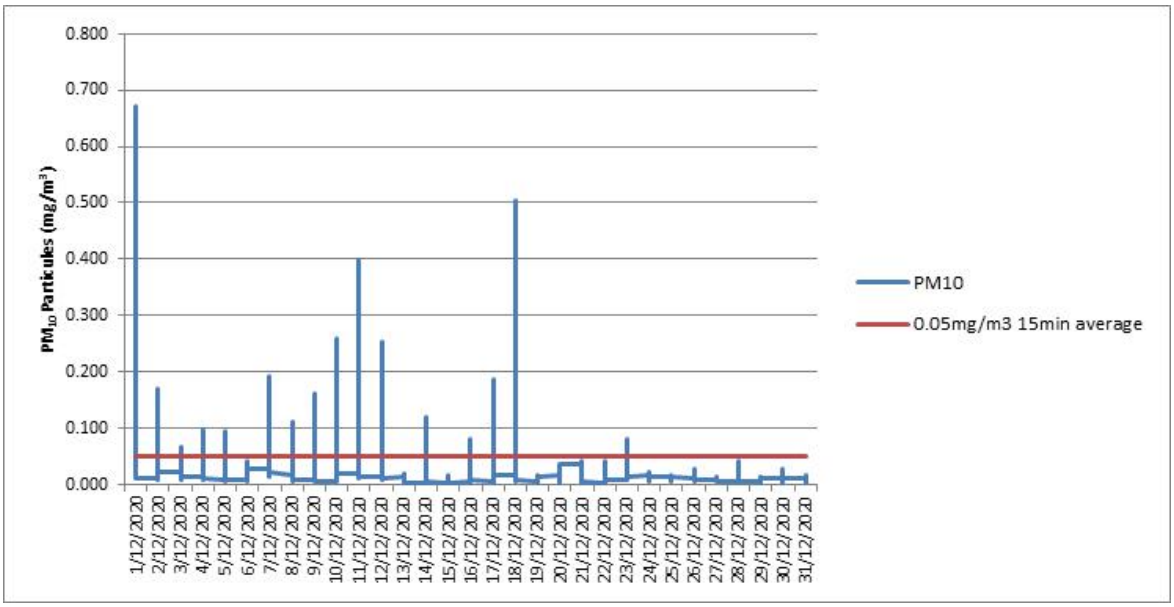

Figure 7 *PM_{10} 15 Minute Daily Average 1st December to 31st December*

The PM_{10} 15 minute daily average appears to coincide with the maximum and minimum 5 minute data with the highest 15 minute average recorded on the 1st December and lowest recorded on the 15th December.

The data has also been graphed for an eight (8) hour average based on a work day cycle and a twenty-four (24) hour average in **Figure 8** and **Figure 9** below.

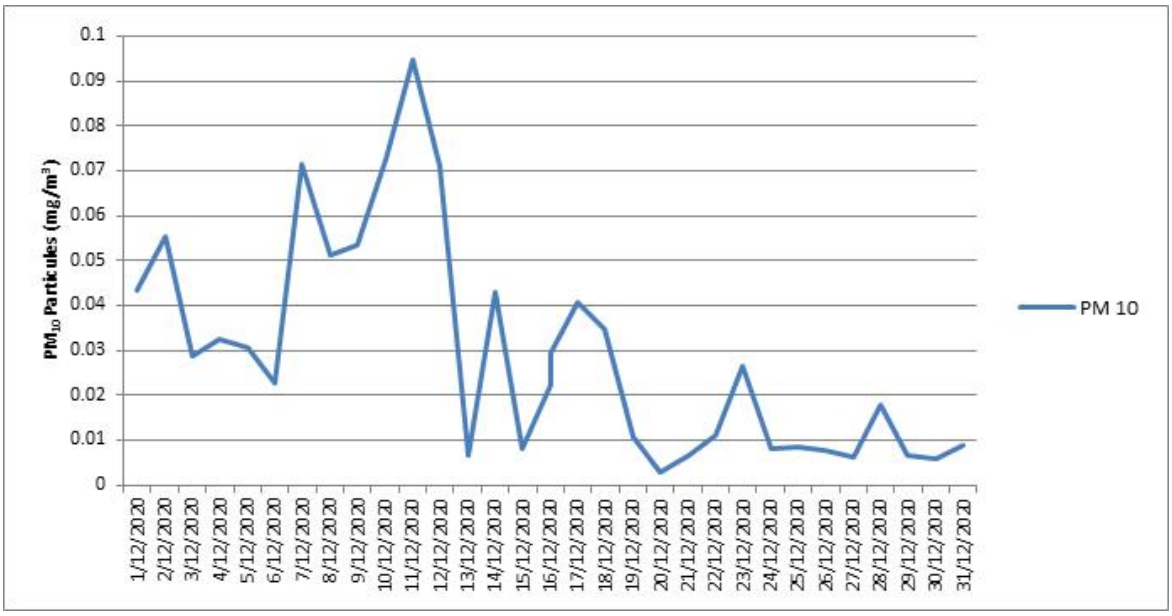

Figure 8 *PM_{10} 8 Hour Average 1st December to 31st December*

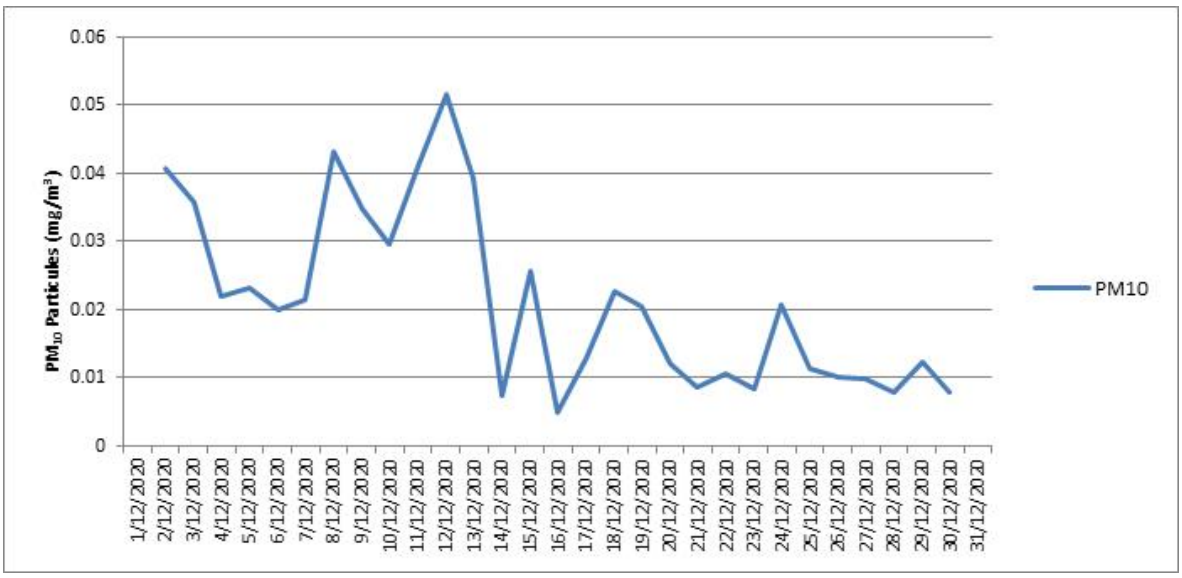

Figure 9 *PM_{10} 24 Hour Average 1st December to 31st December*

The higher PM_{10} 8 hour average and 24 hour average appear to coincide with higher wind speeds and the direction, with the wind direction primarily easterly and southerly directions during the higher recording within the December monitoring period.

5 ASSESSMENT OF DUST MANAGEMENT EFFECTIVENESS

The monitoring data for the month of December indicates some uncertainty with regards to the effectiveness of dust controls. It is noted that the OAQMP (Ref [1]) hasn't yet been fully implemented as the expansion has not yet been commenced.

All the depositional dust gauges indicate results which are below the relevant criterion (Ref [4]) noting that monitoring at DG1B was incomplete due to broken bottle at the time of collection, with the cause unknown. The results of the gauges are consistent with the previous results. It is unclear as to what has resulted in the higher 'B' gauge result: further consideration will be required in subsequent months of monitoring however it is noted that the difference is lesser than what has been previously measured.

The real time monitor, which does not use a NSW EPA approved (Ref [5]) sampling methodology, indicates that there were periods of dust which are in excess of the 24hr average criterion (Ref [4]) for PM_{10} in December. It is noted that the maximum daily average in November was also in excess of the annual TSP criterion. These dust conditions have increased in general from those observed in September and October.

RCA's did not observe any site activities on the 31 December due to the site being closed.

The wind at the time of inspection was from the south-south east in the order of 1.5-2.5m/s and readings of $PM_{2.5}$ reached a maximum of 0.006mg/m^3, PM_{10} reached a maximum of 0.012 mg/m^3 and TSP reached a maximum of 0.012 mg/m^3.

6 LIMITATIONS

This report has been prepared for Concrush Pty Ltd in accordance with an agreement with RCA Australia (RCA). The services performed by RCA have been conducted in a manner consistent with that generally exercised by members of its profession and consulting practice.

This report has been prepared for the sole use of Concrush Pty Ltd. The report may not contain sufficient information for purposes of other uses or for parties other than Concrush Pty Ltd. This report shall only be presented in full and may not be used to support objectives other than those stated in the report without written permission from RCA Australia.

Yours faithfully

RCA AUSTRALIA

Richie Lamont
Environmental Scientist

Fiona Brooker
Environmental Services Manager

REFERENCES

[1] RCA Australia, *Operational Air Quality Management Plan (OAQMP) for Expansion of the Concrush Resource Recovery Facility*, V2.0, July 2020.

[2] Lake Macquarie City Council Local Environmental Plan 2014, under the Environmental Planning and Assessment Act 1979, published 2014.

[3] AS/NZS 3580.1.1:2016 *Methods for sampling and analysis of ambient air: Guide to siting air monitoring equipment*, May 2016.

[4] NSW EPA, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* January 2017.

[5] NSW EPA, *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*, January 2007.

Appendix A

Log of Adjusted ‘B’ Dust Gauges

concrush
reduce. re-use. recycle.

Monthly Dust Gauge Document

The dust gauges are on the blue marked poles

Date	Lid Off – Time & Initial	Lid Closed – Time & Initial
30-11-20	6:00 JC	4:30 JC
01-12-20	6:00 JC	4:30 JC
02-12-20	6:00 JC	4:30 JC
03-12-20	6:30 JC	4:30 JC
04-12-20	7:00 JC	4:00 JC
07-12-20	6:30 JC	4:00 JC
08-12-20	6:00 JC	5:00 JC
09-12-20	6:30 JC	4:00 JC
10-12-20	6:30 JC	4:00 JC
11-12-20	6:30 JC	4:00 JC
15-12-20	6:00 JC	4:00 JC
16-12-20	6:30 JC	4:00 JC
17-12-20	6:00 JC	4:00 JC
18-12-20	6:00 JC	3:30 JC
21-12-20	6:00 JC	4:00 JC
22-12-20	6:00 JC	4:00 JC
23-12-20	6:00 JC	4:00 JC
04-01-21	6:00 JC	4:00 JC
05-01-21	6:00	4:00 JC
06-01-21	6:00 JC	4:00 JC
07-01-21	6:00 JC	4:00 JC
08-01-21	6:00 JC	4:00 JC
11-01-21	6:30 JC	4:00 JC
12-01-21	6:30 JC	4:00 JC
13-01-21	6:30 JC	4:00 JC
14-01-21	6:30 JC	4:00 JC
15-01-21	6:30 JC	4:00 JC
18-01-21	6:30 JC	4:00 JC
19-01-21	6:30 JC	4:00 JC
20-01-21	6:30 JC	4:00 JC
21-01-21	6:30 JC	4:00 JC
22-01-21	6:30 JC	

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Reducing our impact on the environment

Appendix B

Field Sheet

RCA LABORATORIES
• ENVIRONMENTAL •
CONSTRUCTION MATERIALS TESTING

STATIC DUST GAUGES - FIELD SHEET

ENV-F075-1

Client: Concrush
Location: 21 Racecourse Road, Teralba
Date On: 30/11/2020
Date Off: 31/12/2020

Job Number: 13001a
Month/Year: December
Technician: ZL
Field Sheet: Page 1 of 1

Field ID (Job No + Gauge No.)	Lab ID (To be entered by Lab Technician on receipt of samples)	Time Serviced	Funnel Number (if replaced)	Approx. Volume	Notes	Comments
DG1A		7:25		60%	I	Replacement bottle broken before replacement.
DG1B		7:30		0%	–	Hole in bottom of bottle.
DG2A		7:40		60%	I	
DG2B		7:45		10%	N	
DG3A		7:50		60%	I	
DG3B		7:55		10%	N	
DG4A		8:05		60%	I	
DG4B		8:10		10%	N	

Notes:

A = Animals (frogs, lizards, snakes)
O = Organic Matter (specify)
B = Bird Droppings
F = Feathers
G = Grass (and seeds)
N = No foreign mater
T = Tree Litter (twigs, leaves, gum nuts)
I = Insects (and spiders)
MF = Invalid sample: Missing funnel
FB = Invalid sample: Broken funnel
EB = Invalid sample: Excess bird droppings
RN = Invalid sample: Refer to notes below

Appendix C

Laboratory Report Sheets

Robert Carr & Associates Pty Ltd Trading as RCA Laboratories – Environmental
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ABN 53 063 515 711 Ph 02 4902 9200 – Fax 02 4902 9299
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NATA Accredited Laboratory 9811
Corporate Site Number 18077
Accredited for compliance with ISO/IEC 17025-Testing

Concrush Pty Ltd
PO Box 362
Merewether NSW 2291

Attention Helen Milne

Project:	RCA ref 13001a-308/0		
Date:	13/01/2021		
Client reference:	Dust Report December 2020		
Received date:	4/01/2021	**Number of samples:**	8
Client order number:	N/A	**Testing commenced:**	6/01/2021

CERTIFICATE OF ANALYSIS

1 ANALYTICAL TEST METHODS

ANALYSIS	METHOD	UNITS	ANALYSING LABORATORY	NATA ANALYSIS / NON NATA
Dust Depositional Gauge (DDG)	ENV-LAB004*	g/m^2.month	RCA Laboratories - Environmental	NATA

***** The analytical procedures used by RCA Laboratories - Environmental are based on established internationally recognised procedures such as APHA and Australian Standards

2 RESULTS

ANALYSIS	UNITS	DG1A	DG1B	DG2A	DG2B
Depositional Dust Gauge (DDG)					
Sample Number	-	122013001a001	122013001a002	122013001a003	122013001a004
Date sample started	-	30/11/2020	30/11/2020	30/11/2020	30/11/2020
Date sample finished	-	31/12/2020	31/12/2020	31/12/2020	31/12/2020
Sampled By		ZL	ZL	ZL	ZL
Number of days	-	31	31	31	31
Notes	-	I	BROKEN	I	I
Insoluble solids	(g/m^2.month)	4.0	-	0.1	0.9
Ash	(g/m^2.month)	2.3	-	0.1	0.8
Combustible matter	(g/m^2.month)	1.7	-	<0.1	0.1

ANALYSIS	UNITS	DG3A	DG3B	DG4A	DG4B
Depositional Dust Gauge (DDG)					
Sample Number	-	122013001a005	122013001a006	122013001a007	122013001a008
Date sample started	-	30/11/2020	30/11/2020	30/11/2020	30/11/2020
Date sample finished	-	31/12/2020	31/12/2020	31/12/2020	31/12/2020
Sampled By		ZL	ZL	ZL	ZL
Number of days	-	31	31	31	31
Notes	-	I	I	I	I
Insoluble solids	(g/m^2.month)	3.0	3.8	1.6	0.9
Ash	(g/m^2.month)	2.4	3.2	1.2	0.6
Combustible matter	(g/m^2.month)	0.6	0.6	0.4	0.3

Depositional Dust Gauge (DDG)

Analysis on samples is on an as received basis.

Depositional Dust Gauge (DDG) Qualifier Codes
I = Insects (eg. Ants, spiders

Depositional Dust Gauge Quality Control

A blank crucible, containing no deposited matter, is analysed with every batch of 10 samples analysed. The acceptable mass difference between the first and second weighing of a blank crucible, at the indicated steps, in the analysis procedure is +/- 0.001g.

Blank Crucibles Analysis

METHOD STEP	PRE-DETERMINATION		DETERMINATION OF INSOLUBLE SOLIDS		DETERMINATION OF ASH AND COMBUSTIBLE MATTER	
	1st weighing	2nd weighing	1st weighing	2nd weighing	1st weighing	2nd weighing
Crucible No.	Mass of Crucible(g)	Mass of Crucible(g)	Mass of Crucible(g)	Mass of Crucible(g)	Mass of Crucible(g)	Mass of Crucible(g)
166	18.3014	18.3016	18.3016	18.3013	18.3013	18.3012

Please contact the undersigned if you have any queries.

Yours sincerely

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Robert Carr & Associates Pty Ltd Trading as
RCA Laboratories - Environmental

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RCA Internal Quality Review

General

1. Laboratory QC results for Method Blanks, Duplicates and Laboratory Control Samples are included in this QC report where applicable. Additional QC data maybe available on request.
2. RCA QC Acceptance / Rejection Criteria are available on request.
3. Proficiency Trial results are available on request.
4. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
5. When individual results are qualified in the body of a report, refer to the qualifier descriptions that follow.
6. Samples were analysed on an 'as received' basis.
7. Sampled dates in this report are those listed on the COC or sample jars; if no sample dates are noted, the date the samples are received at the laboratory have been used.
8. All soil results are reported on a dry basis, unless otherwise stated. (ACID SULPHATE SOILS)
9. This report replaces any interim results previously issued.

Holding Times.

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample

Receipt Acknowledgment.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

##NOTE: pH duplicates are reported as a range NOT as RPD

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.

2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.

3. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Glossary

UNITS

mg/kg: milligrams per Kilogram

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/L: milligrams per Litre

TERMS

Dry Where moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting.

RPD Relative Percent Difference between two Duplicate pieces of analysis can be obtained upon request.

QCS Quality Control Sample - reported as value recovery

Method Blank In the case of solid samples these are performed on laboratory certified clean sands.

In the case of water samples these are performed on de-ionised water.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

Batch Duplicate A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.

USEPA United States Environment Protection Authority

APHA American Public Health Association

COC Chain of Custody

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within

< indicates less than

> Indicates greater than

ND Not Detected

RCA LABORATORIES
• ENVIRONMENTAL •
CONSTRUCTION MATERIALS TESTING

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ENV-F103-4

Client Name: Concrush Pty Ltd c/- RCA Enviro
Client Site: 21 Racecourse Road, Teralba

Contact Name: R Lamont (RCA Enviro)
Phone Number: 0401 002 912

Email Report To: richiel@rca.com.au, fionab@rca.com.au
Project Manager: Fiona Brooker (RCA Enviro)

Turnaround Required:
× Standard (5 Day)

Date Required:

Expected Reporting Date:
(Laboratory Use Only)

ANALYSIS REQUIRED

Page of

RCA Job Number: 13001a

SAMPLE INFORMATION

RCA Laboratories Environmental Sample Number	Client ID / Description	Date	Matrix	Total Samples	Depositional Dust											Notes:
12201300 1A001	DG1A - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											
12201300 1A002	DG1B - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											Bottle broken no sample
12201300 1A003	DG2A - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											
12201300 1A004	DG2B - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											
12201300 1A005	DG3A - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											
12201300 1A006	DG3B - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											
12201300 1A007	DG4A - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											
12201300 1A008	DG4B - 30/ 11 /2020 - 31 / 12 /2020	31/12/20	W	1	X											

RELINQUISHED BY		RECEIVED BY		Laboratory use only (circle appropriate)
Name: Zac Laughton	Date: 4/1/21	Name: KUO	Date: 4/1/21	Received in good condition: (Yes) No
Of:	Time:	Of: RCALE	Time:	Chilled: Yes (No)

ENV-F103-4