



GrainCorp

Environmental Monitoring Data

Monthly Monitoring Results – November 2016

Newcastle Grain Terminal



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1.0 Introduction and Background:

This monthly monitoring report has been produced to satisfy obligations under the *Protection of the Environment Operations Act 1997* (POEO Act) and associated *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) for licensed facilities to publish or make pollution monitoring data available to members of the public. This report provides a summary of monthly environmental monitoring results for GrainCorp's Newcastle (Carrington) Grain Terminal. Analytical results are included under Sections 4 and 5, as part of this report.

2.0 Newcastle Grain Terminal Site Information:

2.1 Environment Protection License (EPL)	
EPL Number	1296
Licensee's Name	GrainCorp Operations Ltd
Licensee's Address	PO Box A268 Sydney South NSW 1235
Premises Name	Newcastle Grain Terminal
Premises Location	Denison Street Carrington NSW 2294
EPL Link	http://www.environment.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=28906&SYSUID=1&LICID=1296

2.2 Relevant Reporting Dates	
Monthly Summary Monitoring Period	November 2016
Monthly Summary Date Published	3 rd January 2017
Date Results Received by GrainCorp from Monitoring Consultant	20 th December 2016
Date Data Obtained by Monitoring Consultant	25 th November 2016



3.0 Monitoring Frequency and Location:

Under Section 5 (M2) of EPL No. 1296, GrainCorp monitors the concentrations of the required pollutants, with the associated monitoring frequency and sampling method provided below.

3.1 Dust Monitoring							
Monitoring Point	EPA Identification no	Specific Location	Pollutant	Units of Measure	EPA Required Monitoring Frequency	Actual Monitoring Frequency	Sampling Method
DG 4 & Rail Yard HVAS	Point 4	Western boundary of premises, behind northern storage silos, adjacent to Young St Carrington	Particulate Matter	$\mu\text{g}/\text{m}^3$	Every 6 days	49.5	AM-15
			Particulates – Deposited Matter	$\text{g}/\text{m}^2.\text{month}$	Monthly	1.0	AM-19
DG 6 & Smart St HVAS	Point 5	Adjacent to 148 Denison St and Smart St Carrington	Particulate Matter	$\mu\text{g}/\text{m}^3$	Every 6 days	50.5	AM-15
			Particulates – Deposited Matter	$\text{g}/\text{m}^2.\text{month}$	Monthly	1.6	AM-19
DG 5 & R&D HVAS	Point 6	10 Darval St Carrington	Particulate Matter	$\mu\text{g}/\text{m}^3$	Every 6 days	43.9	AM-15
			Particulates – Deposited Matter	$\text{g}/\text{m}^2.\text{month}$	Monthly	1.1	AM-19
DG 3	Point 7	Western Corner on boundary of premises near Darval St	Particulates – Deposited Matter	$\text{g}/\text{m}^2.\text{month}$	Monthly	0.9	AM-19
DG 2	Point 8	Southern Corner of premises behind road receival area	Particulates – Deposited Matter	$\text{g}/\text{m}^2.\text{month}$	Monthly	0.6	AM-19

* DG: Fixed Dust Gauge

* HVAS: High Volume Air Sampler

* AM: Approved Method



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3.2 Dust Monitoring Location Points



AECOM



- Dust Gauge Location
- HVAS Location

Image Source: Google Earth Pro, Accessed 29/9/10

Figure 1 GrainCorp Carrington HVAS and Dust Gauge Locations
GrainCorp Operations Limited
Ambient Air Quality Monitoring
Carrington, NSW



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3.3 Unit of Measure Abbreviations

Unit of Measure Abbreviation	Unit of Measure
$\mu\text{g}/\text{m}^3$	micrograms per cubic metre
$\text{g}/\text{m}^2 \cdot \text{month}$	grams per square metre per month
m^3/s	cubic metres per second
mg/m^3	milligrams per cubic metre



4.0 Certificate of Analysis Monthly Dust Analytical Results

Table 2 Dust Deposition Results – November 2016

Dust Gauge	Insoluble Solids (g/m ² .month)	Annual Average Insoluble Solids (g/m ² .month)	Annual Average Insoluble Solids Criteria (g/m ² .month)	Ash Residue (g/m ² .month)	Ash Residue (% Insoluble Solids)
DG2	1.5	0.6	4.0	0.8	53
DG3	1.3	0.9		0.6	46
DG4	1.6	1.0		0.7	44
DG5	1.6	1.1		0.7	44
DG6	1.7	1.6		0.9	53

Table 3 Total Suspended Particulate Monitoring Results – November 2016

Date of Operation	Smart St (µg/m ³)	R & D (µg/m ³)	Rail Yard (µg/m ³)
1 November 2016	43.2	38.9	43.8
7 November 2016	150	140	134
13 November 2016	39.5	35.8	32.2
19 November 2016	62.0	52.6	60.6
25 November 2016	55.8	48.1	49.8
Average Monthly TSP	70.1	63.1	64.1
12-month Average	50.5	43.9	49.5
12-month Average TSP Criteria	90		

Results in bold denotes exceedences.



Table 4 Microscopic Examination Results – November 2016

Date of Operation	Sample (paper no.)	TSP ($\mu\text{g}/\text{m}^3$)	Coal (%)	Insects (%)	Dirt (%)	Vegetation (%)	Other (%)
7 November 2016	Rail Yard (9378961)	134	<1	<1	85	10	5
19 November 2016	Rail Yard (9378950)	60.6	<1	<1	90	5	5



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5.0 Monthly Exceedance Table

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November 2016

Date Sampled	EPA Identification no	Pollutant	Units of Measure	Sample Value	100 Percentile Limit	Exceedance	Date/Time of Exceedance	Comment
NIL								



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7.0 Correction Log

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November 2016

Monitoring Location	EPA Identification no	Pollutant	Units of Measure	Original Sample Date	New Sample Date	Original Data	Corrected Data	Reason
NIL								