



Feb 2023 - Carrington Grain Terminal Monitoring Summary Report

The following Newcastle Grain Terminal monthly monitoring summary report has been prepared by GrainCorp in accordance with Section 66 of the *Pollution of the Environment Operations Act 1997*. Monitoring data shared with the public on the website includes that collected as part of the Environmental Protection Licence (EPL) for the Newcastle Grain Terminal site. Monthly monitoring summaries are completed on the last day of any given month for the data collected.

Report contents

Section A. Map of Newcastle Grain Terminal and the location of sampling points as per the Environmental Protection Licence

Section B. Newcastle Grain Terminal fumigation emissions monitoring (Sampling Point 2)

Monitoring triggered in this period
and summarised in report?

Yes
see Section B

No
has not been included in report

Site details

EPL Number	1296
Licensee Name	GrainCorp Operations Limited
Address	Newcastle Grain Terminal
EPL Public Register Link	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=1296&id=1296&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Technical Reviewer

A. Costa
Name

17/03/2023
Date

Date published to website

20/03/2023
Date

A. Sampling points as per EPL - Newcastle Grain Terminal



Environment Protection licence (EPL) Monitoring Locations

Point	Location at Newcastle Grain Terminal
2	Discharge from the vent stack fumigation chamber located at the northern-most grain silos

B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2023

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

Monitoring frequency: Continuous during every ventilation

No. of ventilation events during month: 10

Sampling date (start of ventilation event) and silo number	Pollutant (discharged to air)	Sampler (fumigator)	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
			Min. value	Max. value	100 percentile (allowable)			
01/02/23 1155 Silo J2	<i>Scenario 1</i>							
	Methyl bromide	A.Donnelly J.Neill	2.6	4.2	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.115	0.131	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-
08/02/23 0900 Silo J5	<i>Scenario 1</i>							
	Methyl bromide	A.Donnelly P.Carpenter	1.2	4.8	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.389	0.435	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-

B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2023

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

Monitoring frequency: Continuous during every ventilation

No. of ventilation events during month: 10

Sampling date (start of ventilation event) and silo number	Pollutant (discharged to air)	Sampler (fumigator)	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
			Min. value	Max. value	100 percentile (allowable)			
09/02/23 1000 Silo G7	<i>Scenario 1</i>							
	Methyl bromide	A.Donnelly P.Carpenter	0.6	4.6	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.392	0.398	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-
09/02/23 1225 Silo K3	<i>Scenario 1</i>							
	Methyl bromide	A.Donnelly P.Carpenter	0.6	4.8	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.429	0.436	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-

B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2023

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

Monitoring frequency: Continuous during every ventilation

No. of ventilation events during month: 10

Sampling date (start of ventilation event) and silo number	Pollutant (discharged to air)	Sampler (fumigator)	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
			Min. value	Max. value	100 percentile (allowable)			
14/02/2023 854 Silo J1	<i>Scenario 1</i>							
	Methyl bromide	A.Donnelly P.Carpenter	1.4	4	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.375	0.433	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-
22/02/2023 1030 Silo J3	<i>Scenario 1</i>							
	Methyl bromide	J.Neill G.Fryer	2	3.2	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.398	0.407	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-

B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2023

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

Monitoring frequency: Continuous during every ventilation

No. of ventilation events during month: 10

Sampling date (start of ventilation event) and silo number	Pollutant (discharged to air)	Sampler (fumigator)	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
			Min. value	Max. value	100 percentile (allowable)			
24/02/23 10:35 Silo K7	<i>Scenario 1</i>							
	Methyl bromide	P.Carpenter G.Fryer	1.4	2.8	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.433	0.442	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-
28/02/23 0900 Silo H3	<i>Scenario 1</i>							
	Methyl bromide	A.Donnely P.Carpenter	1	1.8	10	grams per cubic meter	Point 2	no
	Volumetric flow rate	-	0.377	0.379	0.494	meters cubed/ second	Point 2	no
	<i>Scenario 2</i>							
	Methyl bromide	-	-	-	19.4	grams per cubic meter	Point 2	-
	Volumetric flow rate	-	-	-	0.17	meters cubed/ second	Point 2	-

B. GrainCorp - Newcastle fumigant ventilation monitoring data summary: Feb 2023

All air monitoring has been conducted in accordance with the methodology prescribed or a methodology approved in writing with NSW EPA.

Monitoring frequency: Continuous during every ventilation

No. of ventilation events during month: 10

Sampling date (start of ventilation event) and silo number	Pollutant (discharged to air)	Sampler (fumigator)	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
			Min. value	Max. value	100 percentile (allowable)			
03/02/2023 0915 Silo H7	Phosphine	A.Donnelly J.Neill	N/A	27	73	parts per million	Point 2	no
13/02/2023 1112 Silo J7	Phosphine	A.Donnelly P.Carpenter	N/A	55	73	parts per million	Point 2	no

MONITORING NOTES:

Scenario 1 is defined as having a fumigation concentration of 10 grams per cubic meter and a one hour initial ventilation period

Scenario 2 is defined as having a fumigation concentration of 19.4 grams per cubic meter and a three hour initial ventilation period