



September 2022 - PKGT Monitoring Summary Report

The following Port Kembla Grain Terminal (PKGT) 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 Port Kembla 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 PKGT and the location of sampling points as per the Environmental Protection Licence

Section B. PKGT fumigation emissions monitoring (Sampling Points 3,4,5,6,7 and 8)

Section C. PKGT interceptor water monitoring (Sampling Point 1)

Section D. PKGT diesel boiler monitoring (Sampling Point 2)

Monitoring triggered in this period and summarised in report?	<input checked="" type="checkbox"/> Yes see Section B	<input type="checkbox"/> No has not been included in report
	<input checked="" type="checkbox"/> Yes see Section C	<input type="checkbox"/> No has not been included in report
	<input type="checkbox"/> Yes see Section D	<input checked="" type="checkbox"/> No has not been included in report

Site details

EPL Number	3693
Licensee Name	GrainCorp Operations Limited
Address	Port Kembla Grain Terminal, Morton Way, Port Kembla NSW 2505
EPL Public Register Link	http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=3693&id=3693&option=licence&searchrange=licence&range=POEO licence&prp=no&status=Issued

Technical Reviewer

A. Costa

Name

17/10/2022

Date

Date published to website

19/10/2022

Date

A. Sampling points as per EPL - Port Kembla Grain Terminal



Environment Protection licence (EPL) Monitoring Locations

Point	Location at PKGT
1	Located at the Bulk Liquid Storage area of the Port Kembla Grain Terminal. The water sample is collected downstream the bund valve from the final section of the interceptor.
2	Diesel boiler air vent located within the bulk liquid storage area directly east of the bulk storage tank area bund.
3 and 4	Most southern fumigation vents located beside silos A1 and B1.
5 and 6	Fumigation vent located in the centre of the site beside silos A9 and B9.
7 and 8	The northern most fumigation vents located beside silos A10 and B10, just north of points 5 and 6.

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B. GrainCorp - Port Kembla Fumigation monitoring data summary: September 2022

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: 5

Sampling date (ventilation event)	Pollutant (discharged to air)	Silo Vent No.	Initial Purge start time^	Initial Purge end time*	Exceedance	Sampler (fumigator)	Parameter	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
					More than one silo vent in initial purge phase?*(yes/no)			Min. value	Max. value	100 percentile (allowable)			
1/09/2022	<i>Single silo ventilation event</i>												
	Phosphine	B3	14:59	n/a	no	R. Newton	Concentration	NA	0.0382	0.0424	grams per second	6	no
							Velocity	0.66	NA	0.5	metres per second		no
	<i>Second silo ventilation event</i>												
No discharge occurred							Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		
14/09/2022	<i>Single silo ventilation event</i>												
	Methyl Bromide	B5	15:55	n/a	No	R. Newton	Concentration	NA	6.1702	8	grams per second	6	no
							Velocity	1.56	NA	1.4	metres per second		no
	<i>Second silo ventilation event</i>												
No discharge occurred							Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		
23/09/2022	<i>Single silo ventilation event</i>												
	Methyl Bromide	A3	15:51	n/a	No	R. Newton	Concentration	NA	6.1454	8	grams per second	5	no
							Velocity	1.55	NA	1.4	metres per second		no
	<i>Second silo ventilation event</i>												
No discharge occurred							Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		
26/09/2022	<i>Single silo ventilation event</i>												
	Methyl Bromide	A7	12:19	n/a	No	R. Newton	Concentration	NA	6.4101	8	grams per second	5	no
							Velocity	1.55	NA	1.4	metres per second		no
	<i>Second silo ventilation event</i>												
No discharge occurred							Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		

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Monitoring frequency: Continuous during every ventilation

No. of ventilation events during month: 5

Sampling date (ventilation event)	Pollutant (discharged to air)	Silo Vent No.	Initial Purge start time^	Initial Purge end time*	Exceedance	Sampler (fumigator)	Parameter	Result		Limit	Units of measure	Monitoring point location	Exceedance (yes/no)
					More than one silo vent in initial purge phase?*(yes/no)			Min. value	Max. value	100 percentile (allowable)			
30/09/2022	<i>Single silo ventilation event</i>												
	Methyl Bromide	A10	11:09	n/a	No	R. Newton	Concentration	NA	6.0284	8	grams per second	7	no
							Velocity	1.53	NA	1.4	metres per second		no
	<i>Second silo ventilation event</i>												
No discharge occurred							Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		

Methyl bromide max concentration = 8g/sec, min velocity = 1.4m/sec

Phosphine max concentration = 0.0424g/sec; min velocity = 0.5m/sec

^ Initial Purge times that coincide are shaded in purple.

*The Initial Purge phase is the time between the start of vent and until emission rate from the grain silo is either 1 gram per second of Methyl Bromide or 0.01 grams per second of Phosphine. Only one grain silo can be in the initial purge phase at any one time. The maximum number of grain silos venting at any one time must not exceed two.

C. GrainCorp - Port Kembla water monitoring data summary: September 2022

The concentration of each pollutant specified below has been determined using the required sampling method, units of measure and sample frequency specified in the EPL. Water parameters and water samples are collected by suitably qualified staff and, where required, water samples are analysed at a NATA accredited laboratory.

Monitoring frequency: Single sample each day during any discharge (i.e. daily)

Number of water release events during month: 4

Monitoring Point Location: Point 1

Number of times measured/sampled during month	Pollutant (discharge to water)	Result		Visible or not visible?	Limit	Units of measure	Exceedance (yes/no)
		Min. value	Max. value		100 percentile (allowable)		
4	Oil and Grease	NA	NA	Not visible	Not visible	Visible	no
	pH	6.95	8.22	NA	6.5-8.5	pH	no
	Total suspended solids	<5	18		50	mg/L	no
	Turbidity	2.47	6.02		40	NTU	no

Sampling Event details			
Sampling date	Sampler	Lab report date	Lab report ID
6/09/2022	D Jackson	13/09/2022	EW2204108
23/09/2022	D Jackson	4/10/2022	EW2204444
28/09/2022	D Jackson	30/09/2022	EW2204496
29/09/2022	D Jackson	7/10/2022	EW2204513

Unit of Measure Abbreviation	Unit of Measure
mg/L	milligrams per litre
pH	pH
Visible	Visible
NTU	nephelometric turbidity units