



## August 2023 - 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)

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

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

### Technical Reviewer

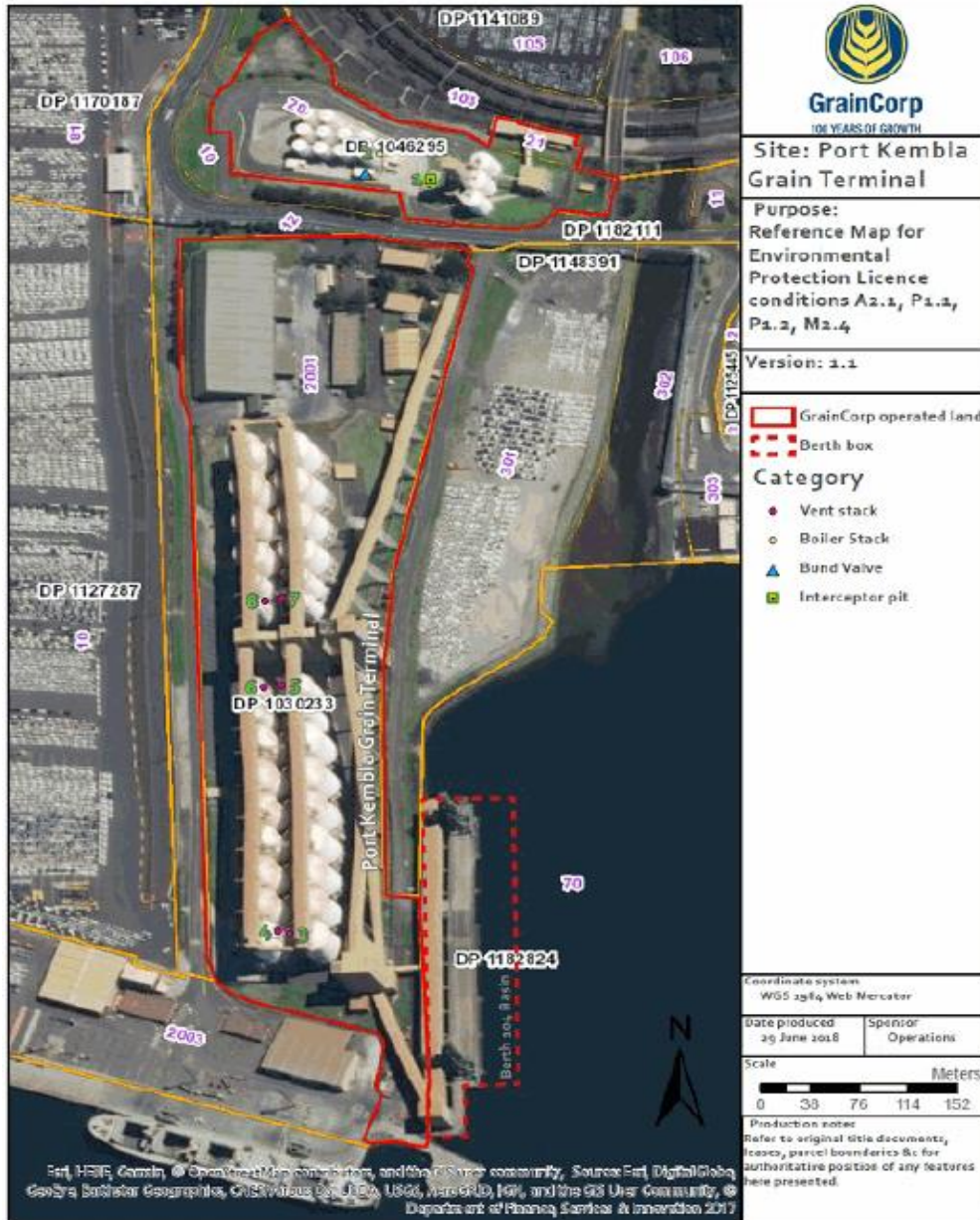
L. McDonald  
Name

11/09/2023  
Date

### Date published to website

15/09/2023  
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.

#

## B. GrainCorp - Port Kembla Fumigation monitoring data summary: August 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: 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)				
1/08/2023	<i>Single silo ventilation event</i>													
	Methyl Bromide	A9	2:08	n/a	no	R.Newton	Concentration	NA	6.2138	8	grams per second	5	no	
							Velocity	1.58	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		
4/08/2023	<i>Single silo ventilation event</i>													
	Phosphine	A3	12:47	n/a	no	R.Newton	Concentration	NA	0.0373	0.0424	grams per second	5	no	
							Velocity	0.68	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		
8/08/2023	<i>Single silo ventilation event</i>													
	Phosphine	B14	9:19	n/a	no	R.Newton	Concentration	NA	0.0364	0.0424	grams per second	8	no	
							Velocity	0.65	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		
20/08/2023	<i>Single silo ventilation event</i>													
	Phosphine	A4	9:14	n/a	no		Concentration	NA	0.0385	0.0424	grams per second	5	no	
							Velocity	0.68	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		

### B. GrainCorp - Port Kembla Fumigation monitoring data summary: August 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: 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)				
22/08/2023	<i>Single silo ventilation event</i>													
	Phosphine	A11	4:03	n/a	no		Concentration	NA	0.0361	0.0424	grams per second	7	no	
							Velocity	0.65	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		
25/08/2023	<i>Single silo ventilation event</i>													
	Phosphine	A15	12:09	n/a	no		Concentration	NA	0.0307	0.0424	grams per second	7	no	
							Velocity	0.65	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		

### C. GrainCorp - Port Kembla water monitoring data summary: August 2023

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:** 6

**Monitoring Point Location:** Point 1

Number of times measured/sampled during month	Pollutant (discharge to water)	Result			Limit		Units of measure	Exceedance (yes/no)
		Min. value	Max. value	Visible or not visible?	100 percentile (allowable)			
6	Oil and Grease	NA	NA	Not Visible	Not visible	Visible	no	
	pH	6.52	8.44	NA	6.5-8.5	pH	no	
	Total suspended solids	<5	20		50	mg/L	no	
	Turbidity	7.27	36		40	NTU	no	

Sampling Event details			
Sampling date	Sampler	Lab report date	Lab report ID
1/08/2023	D Jackson	9/08/2023	EW2303404
7/08/2023	D Jackson	14/08/2023	EW2303558
14/08/2023	D Jackson	22/08/2023	EW2303644
16/08/2023	D Jackson	23/08/2023	EW2303662
23/08/2023	D Jackson	31/08/2023	EW2303808
29/08/2023	B Loke	7/09/2023	EW2303899

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

## D. GrainCorp - Port Kembla boiler air monitoring summary: August 2023

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. Sampling is completed annually by an external NATA accredited specialist and standardised where required.

**EPL period monitored/number of samples required by EPL:** On commission and annually thereafter within anniversary period of licence. One sample is collected during monitoring.

**Monitoring Point Location:** Point 2

**Sampling date:** 9/07/2021

Pollutant (discharge to air)	Result			Limit	Unit of Measure	Exceedance (yes/no)
	Min. Value	Mean	Max. Value	100 Percentile (allowable) (mg/m <sup>3</sup> )		
Carbon monoxide	180	17	230	125	mg/m <sup>3</sup>	No
Moisture	5.8	5.8	5.8		%	NA
Nitrogen Oxides	180	210	230	250	mg/m <sup>3</sup>	No
Oxygen (O <sub>2</sub> )	8.3	9	9.9		%	NA
Solid Particles	<2	<2	<2	50	mg/m <sup>3</sup>	No
Sulphur dioxide	0.058	0.058	0.058	1.5	mg/m <sup>3</sup>	No
Temperature	224	224	224		°C	NA
Velocity	6.5	6.5	6.5		m/s	NA
Volumetric flowrate	0.1	0.1	0.1		m <sup>3</sup> /s	NA

Unit of Measure Abbreviation	Unit of Measure
°C	degrees Celsius
µg/m <sup>3</sup>	micrograms per cubic metre
m/s	metres per second
mg/m <sup>3</sup>	milligrams per cubic metre
%	percent