July 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	**Monitoring triggered in this period and summarised in report?**		
Section B. PKGT fumigation emissions monitoring (Sampling Points 3,4,5,6,7 and 8)		☑ Yes see Section B	☐ No has not been included in report
Section C. PKGT interceptor water monitoring (Sampling Point 1)		☑ Yes see Section C	☐ No has not been included in report
Section D. PKGT diesel boiler monitoring (Sampling Point 2)		☐ Yes see Section D	☑ 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

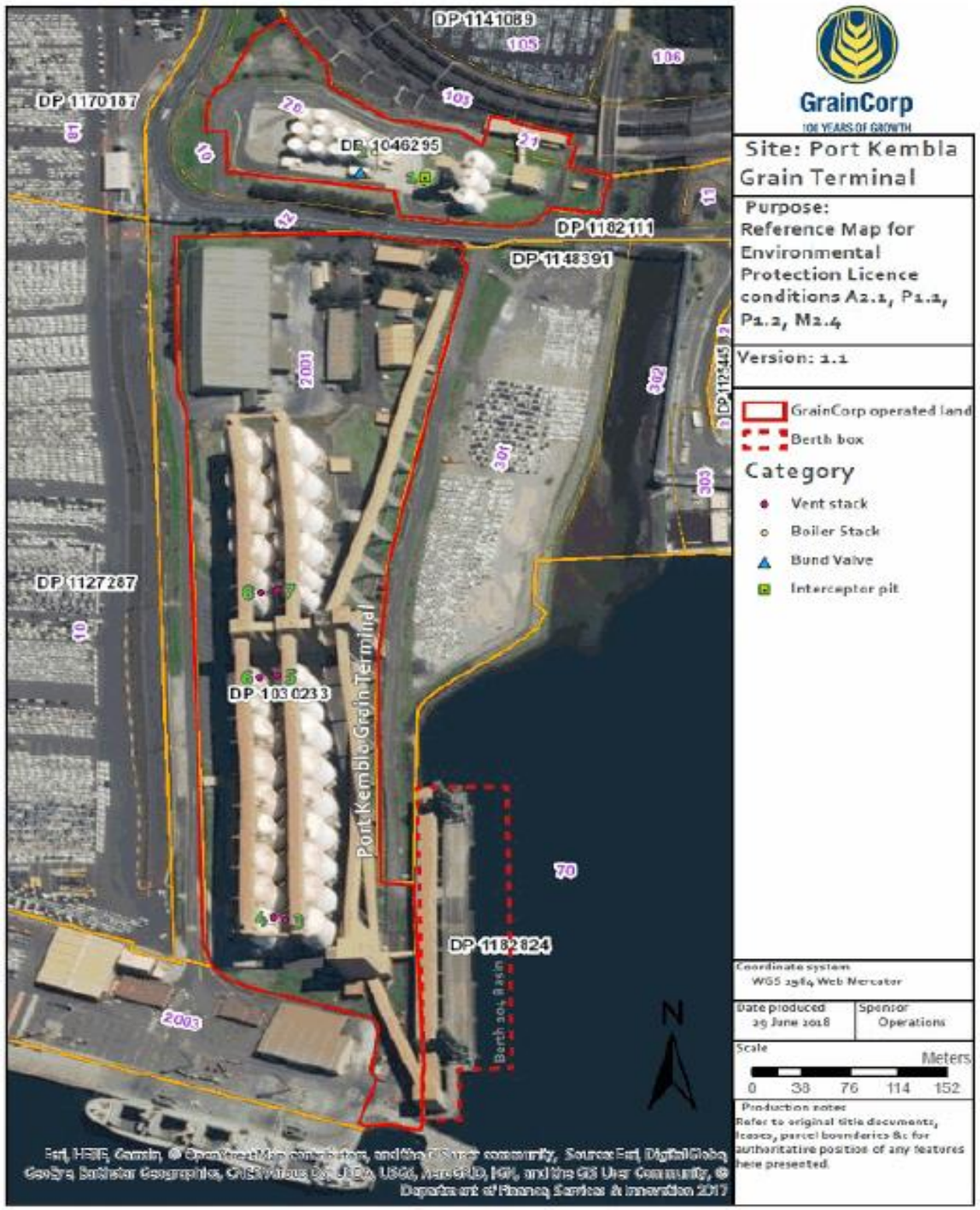
A. Costa
Name

17/08/2022
Date

Date published to website

18/08/2022
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: July 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: 4

Sampling date (ventilation event)	Pollutant (discharged to air)	Silo Vent No.	Initial Purge start time^	Initial Purge end time*	Exceedance: More than one silo vent in initial purge phase?* (yes/no)	Sampler (fumigator)	Parameter	Result: Min. value	Result: Max. value	Limit: 100 percentile (allowable)	Units of measure	Monitoring point location	Exceedance (yes/no)
4/07/2022	*Single silo ventilation event*												
	Phosphine	B15	15:28	n/a	no	R. Newton	Concentration	NA	0.0358	**0.0424**	grams per second	8	no
							Velocity	0.64	NA	**0.5**	metres per second		no
	Second silo ventilation event												
	No discharge occurred						Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		
15/07/2022	*Single silo ventilation event*												
	Methyl Bromide	A5	15:07	n/a	No	R. Newton	Concentration	NA	6.3418	**8**	grams per second	5	no
							Velocity	1.54	NA	**1.4**	metres per second		no
	Second silo ventilation event												
	No discharge occurred						Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		
18/07/2022	*Single silo ventilation event*												
	Methyl Bromide	A7	14:50	n/a	No	R. Newton	Concentration	NA	6.3695	**8**	grams per second	5	no
							Velocity	1.55	NA	**1.4**	metres per second		no
	Second silo ventilation event												
	No discharge occurred						Concentration	NA		-	grams per second	-	
							Velocity		NA	-	metres per second		
28/07/2022	*Single silo ventilation event*												
	Methyl Bromide	A10	17:10	n/a	No	R. Newton	Concentration	NA	6.0566	**8**	grams per second	7	no
							Velocity	1.52	NA	**1.4**	metres per second		no
	Second silo ventilation event												
	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: July 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: 7
Monitoring Point Location: Point 1

		Result			Limit		
Number of times measured/sampled during month	**Pollutant (discharge to water)**	**Min. value**	**Max. value**	**Visible or not visible?**	**100 percentile (allowable)**	**Units of measure**	**Exceedance (yes/no)**
7	Oil and Grease	NA	NA	Not visible	Not visible	Visible	no
	pH	6.75	7.4	NA	6.5-8.5	pH	no
	Total suspended solids	<5	7		50	mg/L	no
	Turbidity	0	5.38		40	NTU	no

Sampling Event details			
Sampling date	**Sampler**	**Lab report date**	**Lab report ID**
4/07/2022	B Loke	12/07/2022	EW2203013
5/07/2022	B Loke	12/07/2022	EW2203016
6/07/2022	B Loke	13/07/2022	EW2203058
7/07/2022	B Loke	18/07/2022	EW2203073
11/07/2022	D Jackson	19/07/2022	EW2203163
21/07/2022	B Loke	2/08/2022	EW2203359
22/07/2022	R Newton	2/08/2022	EW2203406

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