PORT WARATAH COAL SERVICES

EPL MONITORING DATA

KOORAGANG COAL TERMINAL

PORT WARATAH
COAL SERVICES

CONTENTS

PREMISES DETAILS

Environment Protection Licence Number:	1552
Licensee's Name:	Port Waratah Coal Services Limited
Premises Name:	Kooragang Coal Terminal
Premises Address:	Curlew Street, Kooragang Island NSW 2304
Link to POEO Public Register:	Click Here
Link to EPL 1552 on POEO Public Register:	Click Here

AMBIENT DUST MONITORING – DEPOSITED DUST

Monitoring frequency for Deposited Dust Monitoring is monthly.

Note: g/m²/month refers to 'grams per square metre per month'

			Sample Period	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sept 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013
			Sample Date	30/4/2012	30/5/2012	28/6/2012	30/7/2012	31/8/2012	28/9/2012	30/10/2012	29/11/2012	28/12/2012	29/1/2013	28/2/2013	28/3/2013
			Date Data Obtained	23/5/2012	18/6/2012	16/7/2012	13/8/2012	13/9/2012	15/10/2012	12/11/2012	17/12/2012	14/1/2013	14/2/2013	14/3/2013	12/4/2013
			Date Data Published	27/6/2012	27/6/2012	18/7/2012	27/8/2012	18/9/2012	18/10/2012	15/11/2012	20/12/2012	17/1/2013	19/2/2013	21/3/2013	17/4/2013
EPA ID Number	PWCS ID	Location	Analyte/Pollutant	Unit of Measure											
1	DDG-K1	Stockton Centre	Combustible Matter	g/m²/month	0.5	0.5	0.7	0.4	1.0	0.8	1.1	1.0	0.6	0.7	0.3	0.7
			Ash	g/m²/month	0.7	0.6	0.7	0.3	1.0	0.8	4.0	2.4	1.1	1.2	0.6	1.2
			Total Insoluble Solids (Total Dust)	g/m²/month	1.2	1.1	1.4	0.7	2.0	1.6	5.1 [A]	3.4 [A]	1.7	1.9	0.9	1.9
8	DDG-K8	Fern Bay	Combustible Matter	g/m²/month	0.1	0.3	0.4	0.3	0.5	0.3	2.0	0.4	0.3	0.4	0.1	0.2
			Ash	g/m²/month	0.1	0.4	0.5	0.3	0.5	0.5	1.3	0.7	0.5	0.6	0.4	0.2
			Total Insoluble Solids (Total Dust)	g/m²/month	0.2	0.7	0.9	0.6	1.0	0.8	3.3	1.1	0.8	1.0	0.5	0.4

			Sample Period	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014
			Sample Date	29/4/2013	30/5/2013	28/6/2013	30/7/2013	29/8/2013	30/9/2013	29/10/2013	28/11/2013	30/12/2013	30/1/2014	27/2/2014	31/3/2014
			Date Data Obtained	13/5/2013	14/6/2013	10/7/2013	9/8/2013	13/9/2013	14/10/2013	8/11/2013	10/12/2013	13/1/2014	17/2/2014	13/3/2014	14/4/2014
			Date Data Published	21/5/2013	19/6/2013	15/7/2013	14/8/2013	17/9/2013	18/10/2013	14/11/2013	20/12/2013	21/1/2014	20/2/2014	21/3/2014	16/4/2014
EPA ID Number	PWCS ID	Location	Analyte/Pollutant	Unit of Measure											
1	DDG-K1	Stockton Centre	Combustible Matter	g/m²/month	4.7	0.9	0.3	0.4	0.5	1.7	0.5	0.6	0.3	0.2	0.6	1.1
			Ash	g/m²/month	9.9	1.5	0.3	0.5	0.5	1.0	0.8	3.8	0.7	0.3	2.0	5.3
			Total Insoluble Solids (Total Dust)	g/m²/month	14.6 [B]	2.4	0.6	0.9	1.0	2.7[C]	1.3	4.4	1.0	0.5	2.6	6.4
8	DDG-K8	Fern Bay	Combustible Matter	g/m²/month	0.3	0.4	0.3	0.2	0.2	0.5	0.6	0.4	0.3	0.3	0.6	0.3
			Ash	g/m²/month	0.4	0.6	0.4	0.3	0.3	1.0	0.7	0.8	0.3	0.4	0.8	0.3
			Total Insoluble Solids (Total Dust)	g/m²/month	0.7	1.0	0.7	0.5	0.5	1.5	1.3	1.2	0.6	0.7	1.4	0.6

[A] Contained contaminants (Coarse sand)
[B] Contained contaminants (Bird droppings)
[C] Contained contaminants (Bird droppings)

AMBIENT DUST MONITORING – DEPOSITED DUST

			Sample Period	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015
			Sample Date	29/4/2014	29/5/2014	27/6/2014	29/7/2014	28/8/2014	29/9/2014	30/10/2014	27/11/2014	29/12/2014	29/1/2015	27/2/2015	30/3/2015
			Date Data Obtained	14/5/2014	13/6/2014	10/7/2014	11/8/2014	11/9/2014	15/10/2014	14/11/2014	11/12/2014	16/1/2015	16/2/2015	12/3/2015	14/4/2015
			Date Data Published	20/5/2014	20/6/2014	14/7/2014	20/8/2014	18/9/2014	20/10/2014	20/11/2014	15/12/2014	20/1/2015	24/2/2015	18/3/2015	17/4/2015
EPA ID Number	PWCS ID	Location	Analyte/Pollutant	Unit of Measure											
1	DDG-K1	Stockton Centre	Combustible Matter	g/m²/month	1.8	0.6	0.4	1.0	1.5	0.7	2.2	1.9	2.0	0.8	4.7	6.7
			Ash	g/m²/month	4.4	1.5	0.9	1.0	2.9	11.5	5.6	9.0	6.7	1.3	12.9	8.6
			Total Insoluble Solids (Total Dust)	g/m²/month	6.2	2.1	1.3	2.0	4.4	12.2[D]	7.8[D]	10.9[D]	8.7[D]	2.1	17.6[E]	15.3[F]
8	DDG-K8	Fern Bay	Combustible Matter	g/m²/month	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.3	0.3	0.3	0.1
			Ash	g/m²/month	0.3	0.3	0.3	0.6	0.8	0.3	0.4	0.9	0.4	0.3	0.2	0.3
			Total Insoluble Solids (Total Dust)	g/m²/month	0.6	0.6	0.6	1.0	1.1	0.7	0.8	1.4	0.7	0.6	0.5	0.4

			Sample Period	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016
			Sample Date	29/4/2015	28/5/2015	29/6/2015	30/7/2015	28/8/2015	29/9/2015	29/10/2015	27/11/2015	29/12/2015	28/1/2016	N/A
			Date Data Obtained	15/5/2015	11/6/2015	13/7/2015	11/8/2015	10/9/2015	14/10/215	13/11/2015	11/12/2015	15/1/2016	15/2/2016	N/A
			Date Data Published	22/5/2015	17/6/2015	14/7/2015	14/8/2015	18/9/2015	21/10/2015	17/11/2015	14/12/2015	19/1/2016	23/2/2016	N/A
EPA ID Number	PWCS ID	Location	Analyte/Pollutant	Unit of Measure											
1	DDG-K1	Stockton Centre	Combustible Matter	g/m²/month	0.7	0.2	0.1	0.2	0.3	0.2	0.4	0.3	0.4	0.3	A licence amendment approved by the EPA on 22-Feb-2016 has removed Points 1 & 8 from EPL 1552 due to the establishment of the Newcastle Local Air Quality Monitoring Network.
			Ash	g/m²/month	0.7	0.4	0.2	0.4	0.2	0.4	0.4	0.3	0.2	0.2	
			Total Insoluble Solids (Total Dust)	g/m²/month	1.4	0.6	0.3	0.6	0.5	0.6	0.8	0.6	0.6	0.5	
8	DDG-K8	Fern Bay	Combustible Matter	g/m²/month	0.5	0.2	0.1	0.3	0.3	0.3	0.5	0.5	0.4	0.3	
			Ash	g/m²/month	1.4	0.3	0.3	0.5	0.5	0.4	0.7	0.3	0.5	0.3	
			Total Insoluble Solids (Total Dust)	g/m²/month	1.9	0.5	0.4	0.8	0.8	0.7	1.2	0.8	0.9	0.6	

[D] EPA ID#1 contained a large proportion of sand for sample results in September, October, November and December 2014. Additionally bird droppings were observed in the October 2014 sample.
[E] EPA ID#1 was identified by the laboratory to have been heavily contaminated with bird droppings
[F] EPA ID#1 contained a large proportion of sand, as well as significant contamination from bird droppings

AMBIENT DUST MONITORING – DEPOSITED DUST

On 22nd February 2016, the EPA approved an amendment to the Kooragang Coal Terminal Environment Protection Licence (EPL1552), removing the requirement for ambient air quality monitoring due to the commencement of the Newcastle Local Air Quality Monitoring Network.

Although Port Waratah is no longer obliged to publish ambient air quality data obtained after 22nd February 2016, for historical continuity and transparency of data for the public, Port Waratah will continue to voluntarily publish ambient air quality data for the locations previously listed in EPL1552.

			Sample Period	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016
			Sample Date	28/1/2016	26/2/2016	29/3/2016	28/4/2016	30/5/2016	29/6/2016	28/7/2016	29/8/2016	29/9/2016	28/10/16	29/11/2016	29/12/16
			Date Data Obtained	15/2/2016	16/3/2016	14/4/2016	16/5/2016	10/6/2016	14/7/2016	15/8/2016	16/9/2016	14/10/2016	14/11/2016	16/12/2016	12/1/2017
			Date Data Published	23/2/2016	19/5/2016	19/5/2016	19/5/2016	14/6/2016	20/7/2016	17/8/2016	23/9/2016	19/10/2016	16/11/2016	20/12/2016	13/1/2017
EPA ID Number	PWCS ID	Location	Analyte/Pollutant	Unit of Measure											
N/A	DDG-K1	Stockton Centre	Combustible Matter	g/m²/month	0.3	0.4	0.1	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5
			Ash	g/m²/month	0.2	0.4	0.2	0.3	0.1	0.1	0.2	0.3	0.2	0.2	0.4	0.5
			Total Insoluble Solids (Total Dust)	g/m²/month	0.5	0.8	0.3	0.6	0.3	0.3	0.4	0.6	0.5	0.5	0.8	1.0
N/A	DDG-K8	Fern Bay	Combustible Matter	g/m²/month	0.3	0.4	0.3	0.3	0.3	04	0.5	0.5	0.6	0.2	0.2	0.4
			Ash	g/m²/month	0.3	0.2	0.5	0.2	0.3	0.3	0.4	0.7	0.5	0.3	0.4	0.6
			Total Insoluble Solids (Total Dust)	g/m²/month	0.6	0.6	0.8	0.5	0.6	0.7	0.9	1.2	1.1	0.5	0.6	1.0

			Sample Period	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017
			Sample Date	27/1/2017	27/2/2017	30/3/2017	27/4/2017	29/5/2017	28/6/2017	28/7/2017	28/8/2017	28/9/2017	27/10/2017		
			Date Data Obtained	9/2/2017	14/3/2017	13/4/2017	15/5/2017	14/6/2017	19/7/2017	11/8/2017	13/9/2017	13/10/2017	15/11/2017		
			Date Data Published	16/2/2016	16/3/2017	21/4/2017	19/5/2017	19/6/2017	2/8/2017	14/8/2017	20/9/2017	19/10/2017	16/11/2017		
EPA ID Number	PWCS ID	Location	Analyte/Pollutant	Unit of Measure											
N/A	DDG-K1	Stockton Centre	Combustible Matter	g/m²/month	0.4	0.3	0.2	0.3	0.4	0.2	0.4	0.3	0.4	0.4		
			Ash	g/m²/month	0.3	0.3	0.1	0.3	0.1	0.2	0.3	0.4	0.4	0.4		
			Total Insoluble Solids (Total Dust)	g/m²/month	0.7	0.6	0.3	0.6	0.5	0.4	0.7	0.7	0.8	0.8		
N/A	DDG-K8	Fern Bay	Combustible Matter	g/m²/month	0.4	0.4	0.3	0.5	0.2	0.4	0.5	1.6	0.5	0.4		
			Ash	g/m²/month	0.3	0.3	0.3	0.5	0.2	0.3	0.4	3.0	0.4	0.6		
			Total Insoluble Solids (Total Dust)	g/m²/month	0.7	0.7	0.6[G]	1.0	0.4	0.7	0.9	4.6[H]	0.9	1.0		

[G] March 2017 result for DDG-K8 was identified by the laboratory to have been contaminated with bird droppings
[H] August 2017 result for DDG-K8 contained a large proportion of sand

AMBIENT DUST MONITORING – HIGH VOLUME AIR SAMPLER

Monitoring frequency for High Volume Air Samplers is a 24hr period every six (6) days.

Note 1: EPA Point 15 (directional HVAS-TSP, Fern Bay) operates for a 24hr period every six days. During this 24hr period, the unit operates when wind direction is from a West-Northwest to West-Southwest range for more than two minutes. When triggered the unit operates for a minimum of 6 minutes. A reportable result is when there has been a cumulative run time of at least four hours in the 24hr period. Refer to condition M2.4 of EPL 1552 for details.

Note 2: µg/m³ refers to 'micrograms per cubic metre'

		EPA ID Number	14					15				
		PWCS ID	HVAS-K2					HVAS-K4				
		Location	Fern Bay					Fern Bay				
		Analyte/Pollutant	Total Suspended Particulates					Total Suspended Particulates - Directional				
		Unit of Measure	--	--	µg/m³	µg/m³	µg/m³	--	--	µg/m³	µg/m³	µg/m³
Sample Period	Date Data Obtained	Date Data Published	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value
Apr 2012	23/5/2012	27/6/2012	5	5	19	45.0	78	1	1	48	48.0	48
May 2012	18/6/2012	27/6/2012	5	5	24	38.6	46	3	3	55	59.0	63
Jun 2012	16/7/2012	18/7/2012	5	5	25	38.2	52	3	3	26	47.0	59
Jul 2012	13/8/2012	27/8/2012	6	6	12	28.3	36	3	3	35	40.0	47
Aug 2012	13/9/2012	18/9/2012	5	5	30	52.4	65	4	4	49	68.0	92
Sept 2012	15/10/2012	18/10/2012	5	5	47	66.0	96	3	3	80	105.7	134
Oct 2012	12/11/2012	15/11/2012	5	5	36	58.2	83	1	1	50	50.0	50
Nov 2012	17/12/2012	20/12/2012	5	5	23	40.4	61	2	2	51	61.5	72
Dec 2012	14/1/2013	17/1/2013	5	5	20	44.8	52	2	2	16	47.5	79
Jan 2013	14/2/2013	19/2/2013	5	5	23	47.6	90	0	0	--	--	--
Feb 2013	14/3/2013	21/3/2013	5	5	30	37.2	49	1	1	39	39.0	39
Mar 2013	12/4/2013	17/4/2013	5	5	18	34.6	46	1	1	48	48.0	48
Apr 2013	13/5/2013	21/5/2013	5	5	24	39.2	70	2	2	25	30.0	35
May 2013	14/6/2013	19/6/2013	5	5	20	33.6	53	1	1	68	68.0	68
Jun 2013	10/7/2013	15/7/2013	5	5	15	25.8	33	3	3	24	29.0	33
Jul 2013	9/8/2013	14/8/2013	5	5	17	32.6	43	1	1	53	53.0	53
Aug 2013	13/9/2013	17/9/2013	6	6	31	53.8	89	3	3	34	64.7	81
Sep 2013	14/10/2013	18/10/2013	5	5	30	54.4	69	2	2	64	84.0	104
Oct 2013	8/11/2013	14/11/2013	5	5	36	59.8	75	1	1	48	48.0	48
Nov 2013	10/12/2013	20/10/2013	5	5	14	32.2	42	3	3	32	47.3	56
Dec 2013	13/1/2014	21/1/2014	5	5	23	57.4	76	1	1	113	113.0	113
Jan 2014	17/2/2014	20/2/2014	5	5	35	47.6	72	1	1	83	83.0	83
Feb 2014	13/3/2014	21/3/2014	5	5	23	39.4	52	2	2	41	43.0	43
Mar 2014	14/4/2014	16/4/2014	5	5	24	38.2	55	2	2	45	48.5	52
Apr 2014	14/5/2014	20/5/2014	5	5	32	39.6	52	3	3	33	41.0	46

AMBIENT DUST MONITORING – HIGH VOLUME AIR SAMPLER

		EPA ID Number	14					15				
		PWCS ID	HVAS-K2					HVAS-K4				
		Location	Fern Bay					Fern Bay				
		Analyte/Pollutant	Total Suspended Particulates					Total Suspended Particulates - Directional				
		Unit of Measure	--	--	µg/m³	µg/m³	µg/m³	--	--	µg/m³	µg/m³	µg/m³
Sample Period	Date Data Obtained	Date Data Published	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value
May 2014	13/6/2014	20/6/2014	5	5	31	38.4	46	0	0	--	--	--
Jun 2014	10/7/2014	14/7/2014	5	5	24	33.2	41	1	1	30	30.0	30
Jul 2014	11/8/2014	20/8/2014	5	5	14	40.2	52	0	0	--	--	--
Aug 2014	11/9/2014	18/9/2014	5	4[I]	28	31.8	41	2	2	35	36.0	37
Sep 2014	15/10/2014	20/10/2014	5	5	22	30.0	42	1	1	37	37.0	37
Oct 2014	14/11/2014	20/11/2014	6	6	20	54.0	85	0	0	--	--	--
Nov 2014	11/12/2014	15/12/2014	5	5	38	42.6	56	0	0	--	--	--
Dec 2014	16/1/2015	20/1/2015	5	5	25	50.6	68	0	0	--	--	--
Jan 2015	16/2/2015	24/2/2015	5	5	20	34.0	43	0	0	--	--	--
Feb 2015	12/3/2015	18/3/2015	5	5[J]	23	27.6	33	0	0	--	--	--
Mar 2015	14/4/2015	17/4/2015	5	5	24	46.4	89	0	0	--	--	--
Apr 2015	15/5/2015	22/5/2015	5	5	18	27.0	44	1	1	24	24.0	24
May 2015	11/6/2015	17/6/2015	5	5	25	39.4	52	1	1	56	56.0	56
Jun 2015	13/7/2015	14/7/2015	5	5	10	27.4	34	0	0	--	--	--
Jul 2015	11/8/2015	14/8/2015	5	5	17	29.8	51	0	0	--	--	--
Aug 2015	10/9/2015	18/9/2015	5	5	20	36.8	49	1	1	62	62.0	62
Sep 2015	14/10/2015	21/10/2015	5	5	19	24.2	35	1	1	36	36.0	36
Oct 2015	13/11/2015	17/11/2015	5	5	25	35.2	49	0	0	--	--	--
Nov 2015	11/12/2015	14/12/2015	5	5	24	40.6	71	0	0	--	--	--
Dec 2015	15/1/2016	19/1/2016	5	5	27	45.7	66	0	0	--	--	--
Jan 2016	15/2/2016	23/2/2016	5	5	19	46.8	61	0	0	--	--	--
Feb 2016	16/3/2016	18/3/2016	3	3	24	38.7	46	0	0	--	--	--
			A licence amendment approved by the EPA on 22-Feb-2016 has removed Points 14 & 15 from EPL 1552 due to the establishment of the Newcastle Local Air Quality Monitoring Network.									

[I] On 26/8/2014, EPA ID#14 was unable to operate due to a power supply fault
[J] The run date on 16/2/2015 only sampled for 15.4 out of 24 hours due to an electrical fault

AMBIENT DUST MONITORING – HIGH VOLUME AIR SAMPLER

On 22nd February 2016, the EPA approved an amendment to the Kooragang Coal Terminal Environment Protection Licence (EPL1552), removing the requirement for ambient air quality monitoring due to the commencement of the Newcastle Local Air Quality Monitoring Network.

Although Port Waratah is no longer obliged to publish ambient air quality data obtained after 22nd February 2016, for historical continuity and transparency of data for the public, Port Waratah will continue to voluntarily publish ambient air quality data for the locations previously listed in EPL1552.

		EPA ID Number	N/A					N/A				
		PWCS ID	HVAS-K2					HVAS-K4				
		Location	Fern Bay					Fern Bay				
		Analyte/Pollutant	Total Suspended Particulates					Total Suspended Particulates - Directional				
		Unit of Measure	--	--	µg/m³	µg/m³	µg/m³	--	--	µg/m³	µg/m³	µg/m³
Sample Period	Date Data Obtained	Date Data Published	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value
Jan 2016	15/2/2016	23/2/2016	5	5	19	46.8	61	0	0	--	--	--
Feb 2016	16/3/2016	19/5/2016	3	5	22	37.6	50	0	0	--	--	--
Mar 2016	14/4/2016	19/5/2016	0	5	27	36.6	53	0	0	--	--	--
Apr 2016	16/5/2016	19/5/2016	0	5	20	35.8	53	0	0	--	--	--
May 2016	10/6/2016	14/6/2016	0	5	23	40.4	62	0	1	108	108.0	108
Jun 2016	14/7/2016	20/7/2016	0	5	16	18.4	22	0	0	--	--	--
Jul 2016	15/8/2016	17/8/2016	0	5	18	32.4	43	0	0	--	--	--
Aug 2016	16/9/2016	23/9/2016	0	5	22	30.0	43	0	1	22	22.0	22
Sep 2016	14/10/2016	19/10/2016	0	5	18	24.8	34	0	0	--	--	--
Oct 2016	14/11/2016	16/11/2016	0	5	28	39.2	57	0	0	--	--	--
Nov 2016	16/12/2016	20/12/2016	0	5	42	62.4	114	0	0	--	--	--
Dec 2016	12/1/2017	13/1/2017	0	6	23	40.2	58	0	0	--	--	--
Jan 2017	9/2/2017	16/2/2017	0	5	38	54.4	76	0	0	--	--	--
Feb 2017	14/3/2017	16/3/2017	0	4	29	48.0	70	0	0	--	--	--
Mar 2017	13/4/2017	21/4/2017	0	6	37	40.5	45	0	0	--	--	--
Apr 2017	15/5/2017	19/5/2017	0	5	21	26.4	31	0	1	31	31.0	31
May 2017	14/6/2017	19/6/2017	0	5	24	32.2	46	0	1	43	43.0	43
Jun 2017	19/7/2017	2/8/2017	0	5	23	30.6	42	0	1	43	43.0	43
Jul 2017	11/8/2017	14/8/2017	0	5	26	31.6	38	0	1	57	57.0	57
Aug 2017	13/9/2017	20/9/2017	0	5	21	34.0	49	0	1	38	38.0	38
Sep 2017	13/10/2017	19/10/2017	0	5	33	44.4	53	0	0	--	--	--

AMBIENT DUST MONITORING – HIGH VOLUME AIR SAMPLER

EPA ID Number			N/A					N/A				
PWCS ID			HVAS-K2					HVAS-K4				
Location			Fern Bay					Fern Bay				
Analyte/Pollutant			Total Suspended Particulates					Total Suspended Particulates - Directional				
Unit of Measure			--	--	µg/m³	µg/m³	µg/m³	--	--	µg/m³	µg/m³	µg/m³
Sample Period	Date Data Obtained	Date Data Published	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value	No. Measurements Required	No. Measurements Recorded	Min Value	Mean Value	Max Value
Oct 2017	15/11/2017	16/11/2017	0	4	29	38.3	45	0	0	--	--	--

DISCHARGE TO WATERS – OVERFLOW QUALITY

Monitoring Frequency for overflow water quality monitoring is monthly during discharge.

Note: mg/L refers to 'milligrams per litre'

		EPA ID Number	16			17			18		
		PWCS ID	K4 Lagoon			K5 Lagoon			K6 Lagoon		
		Location	Kooragang Coal Terminal Wharf			Kooragang Coal Terminal Wharf			Kooragang Coal Terminal Wharf		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
Apr 2014	--	20/5/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2014	--	20/6/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jun 2014	--	14/7/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2014	--	20/8/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2014	--	18/9/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2014	--	20/10/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2014	--	20/11/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2014	--	15/12/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2014	--	20/1/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jan 2015	--	24/2/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2015	--	18/3/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2015	--	17/4/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
20 Apr 2015	6/5/2015	22/5/2015	<5	7.82	184	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
21 Apr 2015	--	22/5/2015	NS[K]	NS[I]	NS[I]	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
22 Apr 2015	--	22/5/2015	NS[I]	NS[I]	NS[I]	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2015	--	17/6/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jun 2015	--	14/7/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2015	--	14/8/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2015	--	18/9/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2015	--	21/10/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2015	--	17/11/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2015	--	14/12/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		

[K] Due to a severe weather event on 20 & 21 April, no safe access to sample locations was possible on 21 & 22 April. It is unclear whether EPA ID#16 had an overflow on these days.

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	16			17			18		
		PWCS ID	K4 Lagoon			K5 Lagoon			K6 Lagoon		
		Location	Kooragang Coal Terminal Wharf			Kooragang Coal Terminal Wharf			Kooragang Coal Terminal Wharf		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
Dec 2015	--	19/1/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
7 Jan 2016	15/2/2016	23/2/2016	<5	7.61	96	<5	7.61	302	<5	7.65	78
Feb 2016	--	18/3/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2016	--	18/4/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Apr 2016	--	19/5/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2016	--	14/6/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jun 2016	--	20/7/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2016	--	17/8/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2016	--	23/9/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2016	--	19/10/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2016	--	16/11/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2016	--	20/12/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2016	--	13/1/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jan 2017	--	16/2/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2017	--	16/3/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2017	--	21/4/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Apr 2017	--	19/5/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2017	--	19/6/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jun 2017	--	7/7/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2017	--	14/8/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2017	--	20/9/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2017	--	19/10/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2017	--	16/11/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	19			20			21		
		PWCS ID	K7 Lagoon			Detention Pond A&B			Settling Lagoon 1		
		Location	Kooragang Coal Terminal Wharf			Kooragang Coal Terminal			Kooragang Coal Terminal		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
Apr 2014	--	20/5/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2014	--	20/6/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
6 Jun 2014	10/7/2014	14/7/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	7.98	25
7 Jun 2014	10/7/2014	14/7/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	7.97	127
Jul 2014	--	20/8/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2014	--	18/9/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2014	--	20/10/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2014	--	20/11/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2014	--	15/12/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2014	--	20/1/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jan 2015	--	24/2/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2015	--	18/3/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2015	--	17/4/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
1 Apr 2015	9/4/2015	17/4/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.04	35
20 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.04	234
21 Apr 2015	--	22/5/2015	No Discharge/Overflow to Waters			NS[L]	NS[J]	NS[J]	NS[J]	NS[J]	NS[J]
22 Apr 2015	--	22/5/2015	No Discharge/Overflow to Waters			NS[J]	NS[J]	NS[J]	NS[J]	NS[J]	NS[J]
23 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.56	17	<5	7.92	68
24 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.55	15	<5	8.05	39
25 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.20	31
26 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.15	68
27 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.05	52
28 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
29 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			12	7.74	<5	5	8.36	17
30 Apr 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.63	<5	No Discharge/Overflow to Waters		
1 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.58	10	<5	8.34	30
2 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.64	5	<5	8.14	43
3 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.71	8	<5	8.01	64

[L] Due to a severe weather event on 20 & 21 April, no safe access to sample locations was possible on 21 & 22 April. It is unclear whether EPA ID#20 & #21 had an overflow on these days.

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	19			20			21		
		PWCS ID	K7 Lagoon			Detention Pond A&B			Settling Lagoon 1		
		Location	Kooragang Coal Terminal Wharf			Kooragang Coal Terminal			Kooragang Coal Terminal		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
4 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			6	8.17	18
22 May 2015	11/6/2015	17/6/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.25	45
26 Jun 2015	13/7/2015	14/7/2015	No Discharge/Overflow to Waters			<5	7.97	9	No Discharge/Overflow to Waters		
27 Jun 2015	13/7/2015	14/7/2015	No Discharge/Overflow to Waters			<5	7.87	24	No Discharge/Overflow to Waters		
Jul 2015	--	14/8/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2015	--	18/9/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2015	14/10/2015	21/10/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			<5	8.05	218
Oct 2015	--	17/11/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2015	--	14/12/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2015	--	19/1/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
7 Jan 2016	15/2/2016	23/2/2016	<5	7.65	78	<5	7.12	58	<5	7.84	72
Feb 2016	--	18/3/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2016	--	18/4/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Apr 2016	--	19/5/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2016	--	14/6/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
7 Jun 2016	14/7/2016	20/7/2016	No Discharge/Overflow to Waters			<5	7.86	26	No Discharge/Overflow to Waters		
8 Jun 2016	14/7/2016	20/7/2016	No Discharge/Overflow to Waters			<5	7.62	27	No Discharge/Overflow to Waters		
Jul 2016	--	17/8/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2016	--	23/9/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2016	--	19/10/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2016	--	16/11/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2016	--	20/12/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2016	--	13/1/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jan 2017	--	16/2/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2017	--	16/3/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2017	--	21/4/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
5 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.63	20	No Discharge/Overflow to Waters		
6 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.51	38	No Discharge/Overflow to Waters		
12 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.62	47	No Discharge/Overflow to Waters		
13 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.63	43	No Discharge/Overflow to Waters		

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	19			20			21		
		PWCS ID	K7 Lagoon			Detention Pond A&B			Settling Lagoon 1		
		Location	Kooragang Coal Terminal Wharf			Kooragang Coal Terminal			Kooragang Coal Terminal		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
14 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.51	30	No Discharge/Overflow to Waters		
15 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.58	27	No Discharge/Overflow to Waters		
16 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	7.38	12	No Discharge/Overflow to Waters		
May 2017	--	19/6/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
9 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			4	7.71	64	No Discharge/Overflow to Waters		
10 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.78	66	No Discharge/Overflow to Waters		
11 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.72	48	No Discharge/Overflow to Waters		
12 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.63	14	No Discharge/Overflow to Waters		
13 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.69	20	No Discharge/Overflow to Waters		
14 Jun 2017	23/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.65	28	No Discharge/Overflow to Waters		
15 Jun 2017	23/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.65	23	No Discharge/Overflow to Waters		
16 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.49	14	No Discharge/Overflow to Waters		
19 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.62	10	No Discharge/Overflow to Waters		
Jul 2017	--	14/8/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2017	--	20/9/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2017	--	19/10/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2017	--	16/11/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	22			23			24		
		PWCS ID	Clarified Lagoons 1&2			Detention Pond D			EER23 Pump Well		
		Location	Kooragang Coal Terminal			Kooragang Coal Terminal			Kooragang Coal Terminal		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
Apr 2014	--	20/5/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2014	--	20/6/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jun 2014	--	14/7/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2014	--	20/8/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2014	--	18/9/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2014	--	20/10/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2014	--	20/11/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2014	--	15/12/2014	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2014	--	20/1/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jan 2015	--	24/2/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2015	--	18/3/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2015	--	17/4/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
21 Apr 2015	--	22/5/2015	No Discharge/Overflow to Waters			NS[M]	NS[K]	NS[K]	No Discharge/Overflow to Waters		
22 Apr 2015	--	22/5/2015	No Discharge/Overflow to Waters			NS[K]	NS[K]	NS[K]	No Discharge/Overflow to Waters		
23 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	7.91	144	No Discharge/Overflow to Waters		
24 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.00	164	No Discharge/Overflow to Waters		
28 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.14	80	No Discharge/Overflow to Waters		
29 Apr 2015	6/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.15	15	No Discharge/Overflow to Waters		
30 Apr 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.15	14	No Discharge/Overflow to Waters		
1 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.30	16	No Discharge/Overflow to Waters		
2 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.12	10	No Discharge/Overflow to Waters		
3 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			<5	8.14	12	No Discharge/Overflow to Waters		
4 May 2015	12/5/2015	22/5/2015	No Discharge/Overflow to Waters			15	8.11	12	No Discharge/Overflow to Waters		
5 May 2015	11/6/2015	17/6/2015	No Discharge/Overflow to Waters			8	8.16	10	No Discharge/Overflow to Waters		
Jun 2015	--	14/7/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2015	--	14/8/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2015	--	18/9/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2015	--	21/10/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		

[M] Due to a severe weather event on 20 & 21 April, no safe access to sample locations was possible on 21 & 22 April. It is unclear whether EPA ID#23 had an overflow on these days.

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	22			23			24		
		PWCS ID	Clarified Lagoons 1&2			Detention Pond D			EER23 Pump Well		
		Location	Kooragang Coal Terminal			Kooragang Coal Terminal			Kooragang Coal Terminal		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
Oct 2015	--	17/11/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2015	--	14/12/2015	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2015	--	19/1/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
7 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), 5 (CL2)	7.9 (CL1), 7.9 (CL2)	98 (CL1), 94 (CL2)	<5	8.02	120	No Discharge/Overflow to Waters		
8 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	8.0 (CL1), 8.1 (CL2)	80 (CL1), 90 (CL2)	<5	8.10	96	No Discharge/Overflow to Waters		
9 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	7.7 (CL1), 7.8 (CL2)	46 (CL1), 56 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
10 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	8.0 (CL1), 8.1 (CL2)	72 (CL1), 78 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
11 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	7.9 (CL1), 8.2 (CL2)	52 (CL1), 58 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
12 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	8.1 (CL1), 8.3 (CL2)	30 (CL1), 44 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
13 Jan 2016	15/2/2016	23/2/2016	<5 (CL1)	8.0 (CL1)	68 (CL1)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
17 Jan 2016	15/2/2016	23/2/2016	8 (CL1), 11 (CL2)	8.1 (CL1), 8.2 (CL2)	48 (CL1), 46 (CL2)	8	8.32	20	No Discharge/Overflow to Waters		
18 Jan 2016	15/2/2016	23/2/2016	28 (CL1), 9 (CL2)	8.1 (CL1), 8.3 (CL2)	42 (CL1), 40 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
19 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	8.0 (CL1), 8.3 (CL2)	38 (CL1), 20 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
20 Jan 2016	15/2/2016	23/2/2016	<5 (CL1), <5 (CL2)	8.0 (CL1), 8.4 (CL2)	50 (CL1), 13 (CL2)	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2016	--	18/3/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2016	--	18/4/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Apr 2016	--	19/5/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
May 2016	--	14/6/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jun 2016	--	20/7/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jul 2016	--	17/8/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2016	--	23/9/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2016	--	19/10/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2016	--	16/11/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Nov 2016	--	20/12/2016	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Dec 2016	--	13//1/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Jan 2017	--	16/2/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Feb 2017	--	16/3/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Mar 2017	--	21/4/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
5 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	8.21	13	No Discharge/Overflow to Waters		
6 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	8.22	33	No Discharge/Overflow to Waters		

DISCHARGE TO WATERS – OVERFLOW QUALITY

		EPA ID Number	22			23			24		
		PWCS ID	Clarified Lagoons 1&2			Detention Pond D			EER23 Pump Well		
		Location	Kooragang Coal Terminal			Kooragang Coal Terminal			Kooragang Coal Terminal		
		Analyte/Pollutant	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids	Oil and Grease	pH	Total Suspended Solids
		Unit of Measure	mg/L	pH	mg/L	mg/L	pH	mg/L	mg/L	pH	mg/L
		EPL Limit	--	--	--	--	--	--	--	--	--
Sample Date	Date Data Obtained	Date Data Published									
7 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	8.26	17	No Discharge/Overflow to Waters		
8 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	8.21	14	No Discharge/Overflow to Waters		
10 Apr 2017	15/5/2017	19/5/2017	No Discharge/Overflow to Waters			<2	8.23	10	No Discharge/Overflow to Waters		
May 2017	--	19/6/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
9 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.85	112	No Discharge/Overflow to Waters		
10 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.96	58	No Discharge/Overflow to Waters		
11 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.93	66	No Discharge/Overflow to Waters		
12 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	7.97	10	No Discharge/Overflow to Waters		
13 Jun 2017	21/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.02	8	No Discharge/Overflow to Waters		
14 Jun 2017	23/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.04	<5	No Discharge/Overflow to Waters		
15 Jun 2017	23/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.14	7	No Discharge/Overflow to Waters		
16 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.03	6	No Discharge/Overflow to Waters		
17 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.08	10	No Discharge/Overflow to Waters		
18 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.10	10	No Discharge/Overflow to Waters		
19 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.18	10	No Discharge/Overflow to Waters		
20 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.13	<5	No Discharge/Overflow to Waters		
21 Jun 2017	27/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.14	<5	No Discharge/Overflow to Waters		
22 Jun 2017	28/6/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.04	<5	No Discharge/Overflow to Waters		
23 Jun 2017	3/7/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.16	16	No Discharge/Overflow to Waters		
24 Jun 2017	3/7/2017	07/07/17	No Discharge/Overflow to Waters			<2	8.16	<5	No Discharge/Overflow to Waters		
Jul 2017	--	14/8/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Aug 2017	--	20/9/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Sep 2017	--	19/10/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		
Oct 2017	--	16/11/2017	No Discharge/Overflow to Waters			No Discharge/Overflow to Waters			No Discharge/Overflow to Waters		

DATA CORRECTION LOG

EPA ID No.	Analyte/ Pollutant	Sample Date	Original Data	Corrected Data	Date Corrected	Date Originally Published	Reason for Correction

SITE MAP AND MONITORING LOCATIONS

Figure 1: Environment Protection Licence 1552 Monitoring Locations