WV20354

PORT KEMBLA COAL TERMINAL

Environmental Report

May 2012

CLIENT	:	PORT KEMBLA COAL TERMINAL
REPORT ON	:	Sampling & Analysis of Water & Dust Samples
DATE COLLECTED	:	21 May 2012
REPORTED TO	:	Mr Alex Chalk Port Kembla Coal Terminal PO Box 823 Wollongong East NSW 2520
SAMPLED BY	:	SGS Wollongong SGS AUSTRALIA PTY LIMITED
REFERENCE No.	:	WV20354
REPORT STATUS	:	Final NATA Registration: 1397 (SGS Wollongong) NATA Registration: 2562 (SGS Alexandria)
REPORT DATED	:	04 June 2012

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STANDARD METHODS OF ANALYSIS

Total Suspended Solids	-	Standard Methods for the Examination of Water and Wastewater, 19th Edition 2540AD
Oil and Grease	-	Standard Methods for the Examination of Water and Wastewater, 19th Edition 5520AD Chloroform Modification
pH	-	Standard Methods for the Examination of Water and Wastewater, 19th Edition 4500-H+
Airborne Dust Deposition	-	Australian Standard 3580.10.1-1991
Sampling	-	Samples are spot samples taken by SGS

This is to certify that the analysis carried out and displayed in this booklet are in accordance with the Standard Methods listed above:

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Graham Allen
Business Manager

SGS

AIRBORNE DUST DEPOSITION DETAILS

		2012											
	MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	DATE	**20-1-12**	**22-2-12**	**23-3-12**	**23-4-12**	**21-5-12**							
	Sampler	**JH**	**MR**	**JH**	**JH**	**MH**							
GAUGE NO.	Analysis g/m^2 month												
P1	Insoluble Solids	9.8	5.2	2.3	4.5	5.6							
25m South	Ash	5.3	3.1	1.1	2.2	4.0							
No.1	Combustible Matter	4.5	2.1	1.2	2.3	1.6							
Coalberth													
P2	Insoluble Solids	7.0	3.4	1.3	4.7	5.2							
40m South of	Ash	4.1	1.9	0.5	2.4	3.6							
Southern S/P	Combustible Matter	2.9	1.5	0.8	2.3	1.6							
Area													
P3	Insoluble Solids	7.1	7.6	4.0	7.2	23.7							
40m East of	Ash	2.8	5.8	2.7	4.9	14.1							
Southern	Combustible Matter	4.3	1.8	1.3	2.3	9.6							
S/P Area													
P4	Insoluble Solids	11.2	5.1	3.9	6.3	BM							
40m East	Ash	3.1	2.1	1.4	2.1	BM							
No.2 Coalberth	Combustible Matter	8.1	3.0	2.5	4.2	BM							
S/P Area													
P5	Insoluble Solids	11.3	4.1	6.8	7.2	4.8							
Northern	Ash	3.0	1.7	4.5	2.5	2.1							
Settling	Combustible Matter	8.3	2.4	2.3	4.7	2.7							
Pond													
P6	Insoluble Solids	13.5	BB	5.7	7.6	5.0							
40m West No.2	Ash	3.0	BB	2.2	2.5	2.8							
Coalberth	Combustible Matter	10.5	BB	3.5	5.1	2.2							
S/P Area													
P7	Insoluble Solids	2.9	4.4	2.6	5.9	120.5							
260m West No.2	Ash	1.3	3.2	1.6	4.7	114.6							
Coalberth	Combustible Matter	1.6	1.2	1.0	1.2	5.9							
S/P Area													
P8	Insoluble Solids	17.7	3.9	5.6	10.8	15.6							
PKCT.	Ash	3.7	1.7	2.7	3.2	4.8							
North	Combustible Matter	14.0	2.2	2.9	7.6	10.8							
Truckwash													
P9	Insoluble Solids	2.0	2.6	1.6	2.4	4.0							
East Side of	Ash	0.7	1.6	0.9	1.1	2.4							
Water Board	Combustible Matter	1.3	1.0	0.7	1.3	1.6							
Property													
P10	Insoluble Solids	IN	IN	IN	IN	IN							
173 Corrimal St	Ash	IN	IN	IN	IN	IN							
Wollongong	Combustible Matter	IN	IN	IN	IN	IN							
P11	Insoluble Solids	0.9	2.1	0.4	1.1	2.3							
Vikings Oval	Ash	0.2	1.0	0.3	0.4	1.4							
Wollongong	Combustible Matter	0.7	1.1	0.1	0.7	0.9							
P12	Insoluble Solids	1.2	1.1	0.3	1.1	1.9							
157 Church St	Ash	0.5	0.6	0.1	0.6	1.2							
Wollongong	Combustible Matter	0.7	0.5	0.2	0.5	0.7							
P13	Insoluble Solids	2.6	4.1	1.2	3.5	3.1							
200m North of	Ash	1.7	3.0	0.9	2.4	2.2							
A.I.S. RO.RO	Combustible Matter	0.9	1.1	0.3	1.1	0.9							
Berth													
P14	Insoluble Solids	1.8	1.7	0.2	1.6	1.9							
Ross Street	Ash	0.8	0.9	0.0	0.6	1.1							
Wollongong	Combustible Matter	1.0	0.8	0.2	1.0	0.8							
P15	Insoluble Solids	17.2	8.5	9.6	8.9	15.3							
North of PKCT	Ash	4.3	3.1	4.4	2.2	6.4							
Canteen	Combustible Matter	12.9	5.4	5.2	6.7	8.9							
Building													

FM- Funnel Missing
GCA-Gauge Contaminated with Algae

G/M-Gauge Missing
B/C-Broken Crucible

O/F-Gauge Overflowed
In- Inaccessible

E/B-Empty Bottle
B/F-Broken Funnel

G/R-Gauge Removed
G/C - Gauge Contaminated

B/F-Blocked
B/B-Broken I

* gauges overflowed

P- Petrographics

Samplers	
JH	Justin Hughes
BA	Ben Arnold
DW	Darryl Wilson
MH	Micheal Hoare

REPORT 1

WATER QUALITY: SAMPLES FROM MONTHLY INSPECTION

			2011											
		MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		DATE	9-1-12	8-2-12	14-3-12	12-4-12	21-5-12							
		Sampler	MH	JH	JH	MH	MH							
		Report No.	SE104536R0	SE105257R0	SE106473R0	SE107192R0	SE108505R0							
		E.P.A Licence												
TRUCK WASH	(TSS)mg/L	50	22	<5	20	33	190							
NORTH	(O+G)mg/L	<10	<5	<5	<5	<5	<5							
	(pH)	6.5-8.5	7.0	7.8	7.7	8.2	7.6							
	TEMP	C	21.4	20.3	21.5	17.8	18.0							
	ALGAE	CELLS/Ml	NAD	NAD	NAD	NAD	41							
TRUCK WASH	(TSS)mg/L	50	<5	<5	<5	<5	<5							
SOUTH	(O+G)mg/L	<10	<5	<5	<5	<5	<5							
	(pH)	6.5-8.5	7.0	6.9	6.9	7	7.0							
	TEMP	C	25.4	19.8	19.6	17	19.3							
	ALGAE	CELLS/Ml	13	5	14	7	NAD							

N/O- Nil Overflow Observed.

N/A - Not Analysed

NAD - No Algae Detected

N/R - Not Running

****-Wet Weather Samples**

Samplers	
JH	Justin Hughes
MH	Micheal Hoare
BA	Ben Arnold

SGS

SETTLEMENT LAGOON OVERFLOW

WATER QUALITY PARAMETER	DATE Time Sampler Report No	2011 DECEMBER 25-12-12 10.30AM BR SE104507R0	2012 JANUARY 8.1/2012 7.30PM RB SE104507R0	2012 JANUARY 15-1-12 6.45AM RG SE104682R0	2012 JANUARY 16-1-12 10.25AM RB SE104682R0	2012 JANUARY 17-1-12 7.05AM RB SE104738R0	2012 JANUARY 25-1-12 15.15PM RG SE105184R0	2012 JANUARY 26-1-12 06.45AM RG SE105184R0	2012 JANUARY 27-1-12 06.45AM RG SE105184R0	2012 FEBRUARY 1-2-12 08.45AM SDG SE105336R0	2012 FEBRUARY 2-2-12 PKCT TO ADVISE SDG SE105336R0	2012 FEBRUARY 6-2-12 15.00PM KC SE105246R0
(pH)mg/L		7.2	9.5	8.5	7.6	7.3	7.3	7.40	7.3	7.4	7.1	6.8
(TSS)mg/L		12	27	22	23	6	51	81	75	31	8	19
OIL & GREASE mg/L		7	16	5	<5	14	<5	<5	<5	I/S	I/S	<5
AMMONIA mg/L		0.17	0.60	0.94	0.21	0.20	0.03	0.01	<0.01	I/S	I/S	0.03
TOTAL NITROGEN mg/L		5.8	4.3	2.7	2.0	1.9	3.5	3.0	2.8	2.8	2.0	1.6
TKN mg/L		1.9	3.5	2.5	0.90	0.44	1.8	1.3	1.2	0.73	0.61	0.95
TON mg/L		3.9	0.80	1.7	0.72	1.7	3.47	2.99	2.99	I/S	I/S	1.57
FILTERABLE PHOSPHORUS mg/L		0.17	0.004	0.22	0.11	0.12	0.096	0.056	0.052	0.098	0.063	0.041
TOTAL PHOSPHORUS mg/L		0.30	0.43	0.27	0.11	0.06	0.21	0.11	0.10	I/S	I/S	0.09
TOTAL ARSENIC mg/L										I/S	I/S	<0.05
TOTAL CADMIUM mg/L										I/S	I/S	<0.005
TOTAL CHROMIUM mg/L										I/S	I/S	<0.005
TOTAL COPPER mg/L										I/S	I/S	<0.01
TOTAL LEAD mg/L										I/S	I/S	<0.02
TOTAL NICKEL mg/L										I/S	I/S	<0.01
TOTAL ZINC mg/L										I/S	I/S	0.04
MERCURY mg/L										I/S	I/S	<0.0001

Samplers

I/S- Insufficient Sample

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SETTLEMENT LAGOON OVERFLOW

		2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
		FEBRUARY	FEBRUARY	FEBRUARY	FEBRUARY	FEBRUARY	FEBRUARY	FEBRUARY	FEBRUARY	FEBRUARY	MARCH	MARCH
WATER QUALITY PARAMETER	**DATE**	6-2-12	10-2-12	PKCT TO ADVISE	11-2-12	14-2-12	16-2-12	20-2-12	22-2-12	29-2-12	1-3-12	3-3-12
	Time	15.00PM	14.00PM	PKCT TO ADVISE	9.10AM	15.15PM	18.50PM	14.00PM	9.40AM	7.30AM	8.00AM	7.40AM
	Sampler	KC	DP	PKCT TO ADVISE	AC	RG	RG	RG	RG	SDG	AB	AC
	Report No	SE105336R0	SE105336R0	SE105882R0	SE105882R0	SE105882R0	SE105882R0	SE105882R0	SE105882R0	SE106034R0	SE106034R0	SE106034R0
(pH)mg/L		7.0	6.9	6.9	6.9	7.0	7.0	6.70	6.8	7.3	7.0	7.0
(TSS)mg/L		<5	380	79	300	170	68	15	7	12	13.0	10
OIL & GREASE mg/L		I/S	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
AMMONIA mg/L		I/S	0.09	<0.01	0.01	0.01	<0.01	0.03	0.11	0.19	0.01	0.02
TOTAL NITROGEN mg/L		1.7	5.2	1.3	4.2	2.2	2.1	1.5	0.87	1.4	0.99	0.63
TKN mg/L		1.1	5.0	0.44	3.80	1.40	1.2	0.47	0.87	0.63	0.630	0.310
TON mg/L		I/S	4.9	1.3	4.20	2.2	2.10	1.50	1.8	1.21	0.98	0.61
FILTERABLE PHOSPHORUS mg/L		0.036	0.031	0.074	0.057	0.083	0.083	0.068	0.078	0.043	0.016	0.027
TOTAL PHOSPHORUS mg/L		I/S	I/S	0.08	0.07	0.12	0.14	0.08	0.09	0.09	<0.05	0.05
TOTAL ARSENIC mg/L		I/S	I/S	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TOTAL CADMIUM mg/L		I/S	I/S	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TOTAL CHROMIUM mg/L		I/S	I/S	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TOTAL COPPER mg/L		I/S	I/S	0.002	0.003	0.007	0.006	0.002	0.003	0.002	0.001	0.002
TOTAL LEAD mg/L		I/S	I/S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
TOTAL NICKEL mg/L		I/S	I/S	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TOTAL ZINC mg/L		I/S	I/S	0.03	0.03	0.06	0.21	0.06	0.04	0.03	0.04	0.04
MERCURY mg/L		I/S	I/S	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Samplers

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SETTLEMENT LAGOON OVERFLOW

WATER QUALITY PARAMETER	DATE Time Sampler Report No	2012 MARCH 5-3-12 6.45AM KG SE106034R0	2012 MARCH 6-3-12 6.45AM KG SE106126R0	2012 MARCH 7-3-12 6.30AM KG SE106126R0	2012 MARCH 8-3-12 6.30AM KG SE106474R0	2012 MARCH 11-3-12 15.00PM PKCT TO ADVISE SE106474R0	2012 MARCH 17-3-12 15.00PM SDG SE106474R0	2012 MARCH 18-3-12 13.00PM SDG SE106558R0	2012 MARCH 19-3-12 11.30AM TL SE106558R0	2012 MARCH 20-3-12 13.10PM TL SE106558R0	2012 MARCH 21-3-12 12.15PM TL SE106558R0	2012 MARCH 22-3-12 6.45AM TL SE106682R0
(pH)mg/L		7.3	7.5	7.2	7.0	7.1	7.2	8.7	7.8	7.5	7.7	7.4
(TSS)mg/L		24	<5	11	11	20	14	8	7	15	7	<5
OIL & GREASE mg/L		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
AMMONIA mg/L		0.05	0.05	0.06	0.01	0.01	0.04	0.09	0.08	0.08	0.03	0.08
TOTAL NITROGEN mg/L		1.3	1.1	1.4	1.1	2.0	1.7	1.3	1.9	2.3	2.5	3.3
TKN mg/L		0.47	0.22	0.50	0.28	0.33	0.55	0.41	0.42	0.55	0.43	0.45
TON mg/L		1.25	1.05	1.34	0.16	0.20	0.10	0.32	0.34	0.47	0.40	0.37
FILTERABLE PHOSPHORUS mg/L		0.049	0.063	0.050	0.056	0.12	0.055	0.059	0.080	0.089	0.087	0.13
TOTAL PHOSPHORUS mg/L		0.07	0.06	0.07	0.06	0.14	0.09	0.08	0.10	0.11	0.12	0.14
TOTAL ARSENIC mg/L		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001
TOTAL CADMIUM mg/L		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
TOTAL CHROMIUM mg/L		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001
TOTAL COPPER mg/L		0.002	0.001	0.002	<0.01	<0.01	<0.01	0.002	0.002	0.002	0.002	0.002
TOTAL LEAD mg/L		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001
TOTAL NICKEL mg/L		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.002	0.002	0.003	0.003	0.002
TOTAL ZINC mg/L		0.02	0.02	0.03	0.02	0.02	0.03	0.017	0.016	0.017	0.032	0.014
MERCURY mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Samplers

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SETTLEMENT LAGOON OVERFLOW

		2012	2012	2012	2012	2012	2012	2012	2012	2012		
		MARCH	MARCH	APRIL	APRIL	APRIL	APRIL	APRIL	APRIL	APRIL		
WATER QUALITY PARAMETER	**DATE** **Time** **Sampler** **Report No**	23-3-12 6.30AM SDG SE106682R0	24-3-12 7.30AM SDG SE106682R0	2-4-12 9.30AM KG SE106894R0	19-4-12 7.15AM PKCT TO ADVISE SE107450R0	20-4-12 6.30AM KG SE107733R0	20-4-12 6.30PM AC SE107733R0	21-4-12 6.15AM KG SE107733R0	27-4-12 16.00PM PKCT TO ADVISE SE107733R0	29-4-12 11.15AM AC SE107843		
(pH)mg/L		**7.1**	**7.2**	**9.3**	**7.3**	**7.2**	**7.1**	**7.3**	**7.5**	**7.7**		
(TSS)mg/L		**13**	**8**	**11**	**12**	**<5**	**23**	**<5**	**<5**	**<5**		
OIL & GREASE mg/L		**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**		
AMMONIA mg/L		**0.08**	**0.04**	**0.05**	**0.06**	**0.01**	**0.01**	**0.07**	**0.19**	**0.14**		
TOTAL NITROGEN mg/L		**4.4**	**3.4**	**3.6**	**2.7**	**2.1**	**2.4**	**2.7**	**2.7**	**2.4**		
TKN mg/L		**0.81**	**0.80**	**1.4**	**0.71**	**0.59**	**0.50**	**0.42**	**0.45**	**0.55**		
TON mg/L		**0.73**	**0.76**	**1.35**	**0.71**	**0.58**	**0.49**	**0.35**	**0.26**	**0.41**		
FILTERABLE PHOSPHORUS mg/L		**0.14**	**0.11**	**0.005**	**0.027**	**0.074**	**0.150**	**0.150**	**0.110**	**0.11**		
TOTAL PHOSPHORUS mg/L		**0.18**	**0.14**	**<0.05**	**0.06**	**0.08**	**0.11**	**0.14**	**0.12**	**0.11**		
TOTAL ARSENIC mg/L		**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**		
TOTAL CADMIUM mg/L		**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**		
TOTAL CHROMIUM mg/L		**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**		
TOTAL COPPER mg/L		**0.002**	**0.003**	**0.004**	**0.003**	**0.002**	**0.001**	**0.002**	**0.002**	**0.002**		
TOTAL LEAD mg/L		**<0.001**	**<0.001**	**<0.001**	**0.004**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**		
TOTAL NICKEL mg/L		**0.003**	**0.002**	**0.003**	**0.002**	**0.003**	**0.002**	**0.002**	**0.003**	**0.003**		
TOTAL ZINC mg/L		**0.018**	**0.017**	**0.062**	**0.150**	**0.021**	**0.015**	**0.015**	**0.019**	**0.018**		
MERCURY mg/L		**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**		

Samplers

SETTLEMENT LAGOON

		2012	2012	2012	2012	2012							
		JANUARY	FBERUARY	MARCH	APRIL	MAY							
WATER QUALITY	**DATE**	9-1-12	8-2-12	14-3-12	12-4-12	9-5-12							
PARAMETER	**Time**	10AM	9.30AM	11.00AM	10.30AM	10.30AM							
	Sampler	JH	MH	JH	JH	MH							
	Report No	SE104536R0	SE105257R0	SE106473R0	SE107192R0	SE108056R0							
(pH)mg/L		**9.7**	**7.2**	**7.6**	**8.6**	**8.6**							
(TSS)mg/L		**25**	**<5**	**26**	**48.0**	**10**							
OIL & GREASE mg/L		**10**	**<5**	**<5**	**<5**	**<5**							
AMMONIA mg/L		**0.11**	**0.07**	**0.08**	**0.06**	**0.10**							
TOTAL NITROGEN mg/L		**3.4**	**2.0**	**1.7**	**4.6**	**4.1**							
TKN mg/L		**2.7**	**1.3**	**0.62**	**1.7**	**1.5**							
TON mg/L		**2.6**	**1.2**	**0.54**	**1.6**	**1.4**							
FILTERABLE PHOSPHORUS mg/L		**<0.002**	**0.036**	**0.055**	**0.02**	**0.016**							
TOTAL PHOSPHORUS mg/L		**0.23**	**0.15**	**0.11**	**0.17**	**0.06**							
ALGAE cells/Ml		**229849**	**0**	**339440**	**356332**	**179986**							
ALGAE TOXIN AND TYPE		**89638**	**90542**	**92095**	**92942**	**93932**							
REPORT NUMBER													

NORTHERN BREAKWALL

		2012	2012	2012	2012	2012							
		JANUARY	FBERUARY	MARCH	APRIL	MAY							
WATER QUALITY	**DATE**	9-1-12	8-2-12	14-3-12	12-4-12	9-5-12							
PARAMETER	**Time**	10AM	9.30AM	11.00AM	10.30AM	10.30AM							
	Sampler	JH	MH	JH	JH	MH							
	Report No	SE104536R0	SE105257R0	SE106473R0	SE107192R0	SE108056R0							
CHLOROPYLL A mg/L		**<0.0005**	**0.0007**	**<0.0005**	**0.0015**	**<0.0005**							

NORTH POND

		2012	2012	2012	2012	2012							
		JANUARY	FBERUARY	MARCH	APRIL	MAY							
WATER QUALITY	**DATE**	9-1-12	8-2-12	14-3-12	12-4-12	9-5-12							
PARAMETER	**Time**	10AM	9.30AM	11.00AM	10.30AM	10.30AM							
	Sampler	JH	MH	JH	JH	MH							
	Report No	SE104536R0	SE105257R0	SE106473R0	SE107192R0	SE108056R0							
(pH)mg/L		**7.3**	**6.7**	**6.8**	**5.4**	**7.1**							
(TSS)mg/L		**53**	**6**	**59**	**12.0**	**28**							
OIL & GREASE mg/L		**<5**	**<5**	**<5**	**<5**	**<5**							
AMMONIA mg/L		**0.04**	**<0.01**	**0.07**	**0.06**	**0.22**							
TOTAL NITROGEN mg/L		**2.8**	**0.22**	**1.6**	**1.4**	**3.8**							
TKN mg/L		**2.7**	**0.21**	**1.5**	**0.85**	**1.7**							
TON mg/L		**2.7**	**0.20**	**1.4**	**0.79**	**1.5**							
FILTERABLE PHOSPHORUS mg/L		**0.007**	**0.005**	**0.007**	**0.03**	**0.007**							
TOTAL PHOSPHORUS mg/L		**0.16**	**<0.05**	**0.11**	**<0.05**	**0.13**							
ALGAE cells/Ml		**13726.00**	**62**	**318**	**3401**	**402**							
ALGAL COUNT		**89638**	**90542**	**92095**	**92942**	**93932**							
REPORT NUMBER													

CENTRAL POND

		2012	2012	2012	2012	2012							
		JANUARY	FBERUARY	MARCH	APRIL	MAY							
WATER QUALITY	**DATE**	9-1-12	8-2-12	14-3-12	12-4-12	9-5-12							
PARAMETER	**Time**	10AM	9.30AM	11.00AM	10.30AM	10.30AM							
	Sampler	JH	MH	JH	JH	MH							
	Report No	SE104536R0	SE105257R0										
(pH)mg/L		**7.7**	**7.2**	**NS**	**NS**	**NS**							
(TSS)mg/L		**540**	**87**	**NS**	**NS**	**NS**							
OIL & GREASE mg/L		**<5**	**<5**	**NS**	**NS**	**NS**							
AMMONIA mg/L		**0.10**	**<0.01**	**NS**	**NS**	**NS**							
TOTAL NITROGEN mg/L		**48**	**1.8**	**NS**	**NS**	**NS**							
TKN mg/L		**44**	**0.88**	**NS**	**NS**	**NS**							
TON mg/L		**44**	**0.88**	**NS**	**NS**	**NS**							
FILTERABLE PHOSPHORUS mg/L		**0.073**	**0.071**	**NS**	**NS**	**NS**							
TOTAL PHOSPHORUS mg/L		**1.9**	**0.13**	**NS**	**NS**	**NS**							
ALGAE cells/Ml		**387**	**0**	**NS**	**NS**	**NS**							
ALGAL COUNT		**89638**	**90542**										
REPORT NUMBER													

SGS

SOUTH POND

		2012	2012	2012	2012	2012							
		JANUARY	FBERUARY	MARCH	APRIL	MAY							
WATER QUALITY	**DATE**	9-1-12	8-2-12	14-3-12	12-4-12	9-5-12							
PARAMETER	**Time**	10AM	9.30AM	11.00AM	10.30AM	10.30AM							
	Sampler	JH	MH	JH	JH	MH							
	Report No	SE104536R0	SE105257R0	SE106473R0	SE107192R0	SE108056R0							
(pH)mg/L		**7.8**	**7.6**	**7.4**	**7.8**	**7.7**							
(TSS)mg/L		**22**	**25**	**660**	**430**	**11**							
OIL & GREASE mg/L		**29**	**<5**	**<5**	**<5**	**<5**							
AMMONIA mg/L		**0.17**	**<0.01**	**0.04**	**0.13**	**0.04**							
TOTAL NITROGEN mg/L		**4.4**	**2.0**	**8.0**	**26**	**4.8**							
TKN mg/L		**1.0**	**0.65**	**6.9**	**18**	**0.81**							
TON mg/L		**0.84**	**0.65**	**6.8**	**17**	**0.77**							
FILTERABLE PHOSPHORUS mg/L		**0.28**	**0.14**	**0.084**	**0.77**	**0.19**							
TOTAL PHOSPHORUS mg/L		**0.30**	**0.16**	**0.36**	**0.96**	**0.21**							
ALGAE cells/Ml		**962**	**0**	**0**	**743**	**1056**							
ALGAL COUNT		**89638**	**90542**	**92095**	**92942**	**93932**							
REPORT NUMBER													

WORKSHOP POND

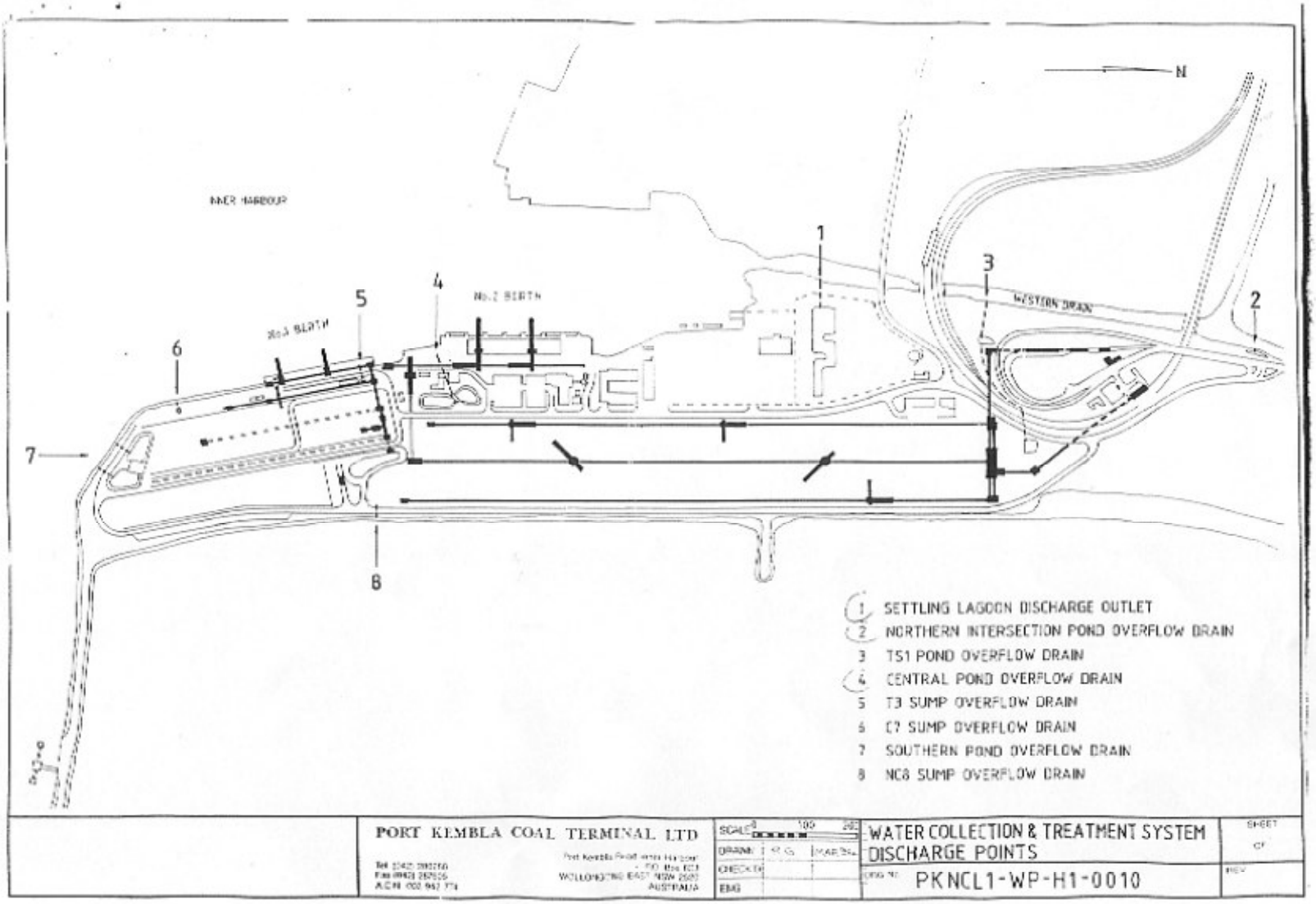
		2012	2012	2012	2012	2012							
		JANUARY	FBERUARY	MARCH	APRIL	MAY							
WATER QUALITY	**DATE**	9-1-12	8-2-12	14-3-12	12-4-12	9-5-12							
PARAMETER	**Time**	10AM	9.30AM	11.00AM	10.30AM	10.30AM							
	Sampler	JH	MH	JH	JH	MH							
	Report No	SE104536R0	SE105257R0										
(pH)mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
(TSS)mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
OIL & GREASE mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
AMMONIA mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
TOTAL NITROGEN mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
TKN mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
TON mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
FILTERABLE PHOSPHORUS mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
TOTAL PHOSPHORUS mg/L		**NS**	**NS**	**NS**	**NS**	**NS**							
ALGAE cells/Ml		**NS**	**NS**	**NS**	**NS**	**NS**							

SETTLEMENT LAGOON

			2012	2012	2012			
			JANUARY	FBERUARY	MARCH			
WATER QUALITY PARAMETER		**DATE Time Sampler Report No**	9-1-12 10AM JH SE104536R0	8-2-12 9.30AM MH SE105257R0	14-3-12 11.00AM JH SE106473R0			
Arsenic	**mg/L**		**<0.05**	**<0.05**	**<0.05**			
Cadmium	**mg/L**		**<0.005**	**<0.005**	**<0.005**			
Chromium	**mg/L**		**<0.005**	**<0.005**	**<0.005**			
Copper	**mg/L**		**<0.01**	**<0.01**	**<0.01**			
Lead	**mg/L**		**<0.02**	**<0.02**	**<0.02**			
Nickel	**mg/L**		**<0.01**	**<0.01**	**<0.01**			
Zinc	**mg/L**		**0.04**	**0.04**	**0.03**			
Mercury	**mg/L**		**<0.0001**	**<0.0001**	**<0.0001**			

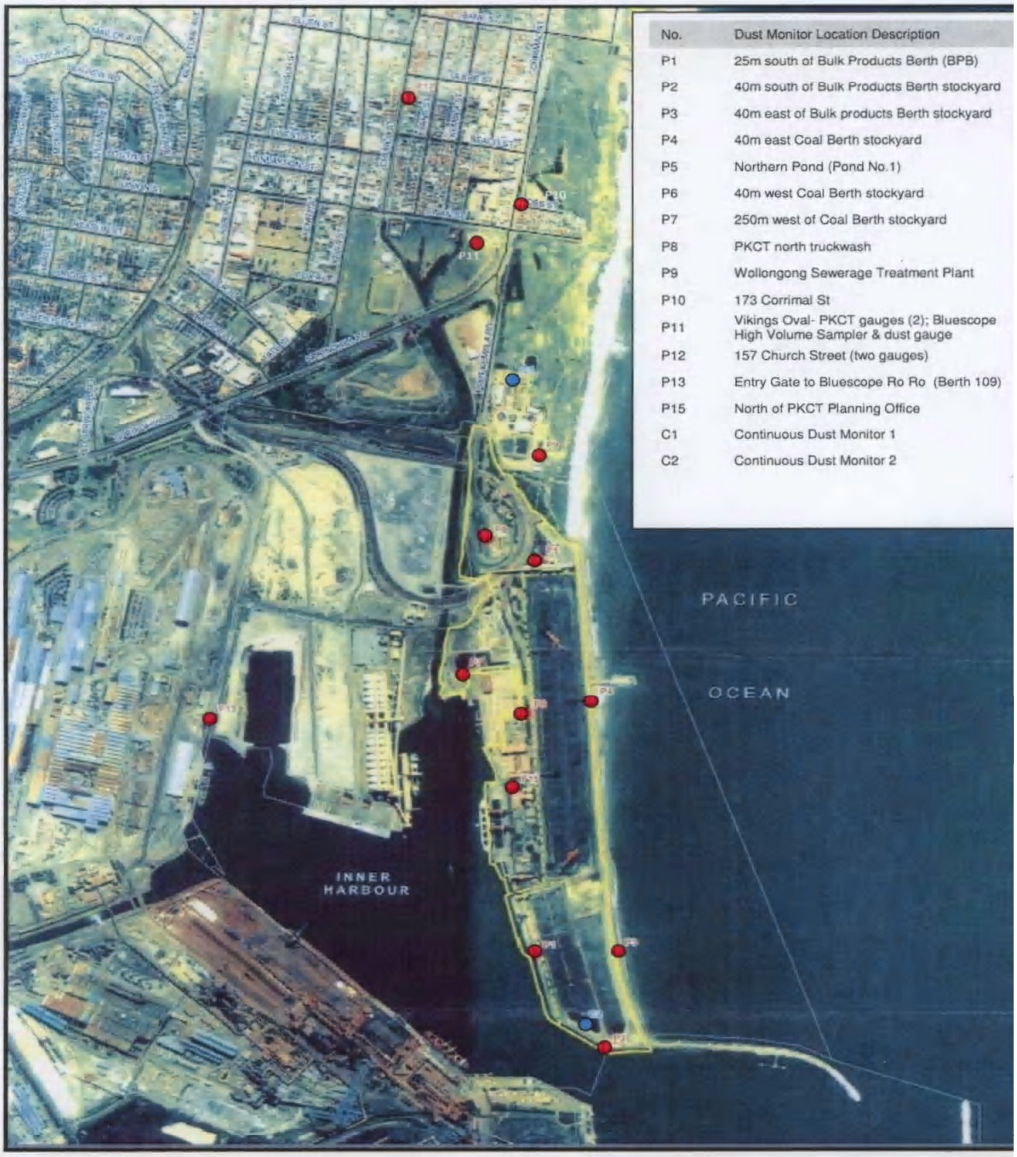
Samplers	
JH	Justin Hughes
MH	Michael Hoare
BA	Ben Arnold

Attachment A
Water Collection Points



PORT KEMBLA COAL TERMINAL
DUST MONITOR LOCATIONS

18 May 201



No.	Dust Monitor Location Description
P1	25m south of Bulk Products Berth (BPB)
P2	40m south of Bulk Products Berth stockyard
P3	40m east of Bulk products Berth stockyard
P4	40m east Coal Berth stockyard
P5	Northern Pond (Pond No.1)
P6	40m west Coal Berth stockyard
P7	250m west of Coal Berth stockyard
P8	PKCT north truckwash
P9	Wollongong Sewerage Treatment Plant
P10	173 Corrimal St
P11	Vikings Oval- PKCT gauges (2); Bluescope High Volume Sampler & dust gauge
P12	157 Church Street (two gauges)
P13	Entry Gate to Bluescope Ro Ro (Berth 109)
P15	North of PKCT Planning Office
C1	Continuous Dust Monitor 1
C2	Continuous Dust Monitor 2

Dust Gauges- DECCW EPL sites

Dust Gauges- Other

Continuous Dust Monitor Sites

Bluescope High Volume Sampler P11

PKCT Site Boundary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SGS Australia Pty Limited

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