

LTD.





Licencee:	Port Kembla Coal Terminal Limited
Environment Protection Licence:	1625
Licence URL:	http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106587&SYSUID=1&LICID=1625
Location:	Port Kembla Road, Port Kembla Inner Harbour, Wollongong
Postal Address:	PO Box 823, Wollongong East 2502



LTD.



PORT KEMBLA COAL TERMINAL DUST & WEATHER MONITOR LOCATIONS

16th October 2015



EPL No.	PKCT No.	Dust Monitor Location Description							
1	P1	25m south of Bulk Products Berth (BPB)							
2	P2	40m south of Bulk Products Berth stockyard							
3	P3	40m east of Bulk Products Berth stockyard							
4	P4	40m east Coal Berth stockyard							
5	P5	Northern Pond (Pond No.1)							
6	P6	40m west Coal Berth stockyard							
7	P7	250m west of Coal Berth stockyard							
8	P8	PKCT north truckwash							
9	P9	Wollongong Wastewater Treatment Plant							
15	P10	North of PKCT Planning Office							
17	P11	Entry Gate to BlueScope Ro Ro (Berth 109)							
12	R1	157 Church Street (two gauges)							
19	R2	Vikings Oval, Wollongong (two gauges)							
TBA	R3	Links Seaside Apartments							
20	C1	Continuous Dust Monitor 1							
21	C2	Continuous Dust Monitor 2							

refer PKCT Environment Protection Licence(EPL) No. 1625 (EPA ID No.) Dust Gauges- Environment Protection Licence monitoring sites Sites denoted "P": industrial; "R": residential

- Conti
 - Continuous Dust Monitor Sites- additional

(a) BlueScope High Volume Sampler & dust gauge(b) PKCT EPL Monitoring Site R2 (2 gauges)Weather stations

(a) at each continuous dust monitor site (b) PKCT Main Control Room



LTD.



EP	L MONITORING S	SITES- INDUSTRIAL					Cal	endar '	Year 2	018]							
	монтн		нас	FER	MAR	APR	нат	нис	301	AU6	SEP	0CT	нот	DEC	1					verage: grams ire metre.month		
			1 200	FEB	пак	AF A	пат	Jon	JOL	HUG I	327	001		DEC					rolling 12	PKCT		
EPL No.	Location Gauge Number	analysis: qramsfsquaro metre.month													Samples collected	мін	MEAN	MAX	month average	arrorrmont critoria		
1	P1	Insoluble Solids	2.8	4.3	1.8	3.1	2.9	3.7	4.1	2.8	2.8	1.2	3.8	3.0	12	1.2	3.0	4.3	3.0	15.0		
	25m South	Ash	1.6	1.8	1.1	1.9	1.6	2.5	3.1	1.8	1.9	0.6	2.6	1.9	12	0.6	1.9	3.1				
2	BPB Coal Berth P2	Combustible Matter Insoluble Solids	1.2	2.5	0.7	1.2	1.3 2.3	1.2 4.8	1.0 2.9	1.0	0.3	0.6	1.2	1.1	12 12	0.6	1.2	2.5	1.2 3.0	12.0		
-	40m South of	Ash	1.4	1.7	1.3	2.4	1.5	3.4	2.4	4.4	1.6	1.2	2.6	1.4	12	1.3	2.1	4.4	0.0	10.0		
	BPB Stockyard	Combustible Matter	0.8	1.2	1.5	1.9	0.8	1.4	0.5	1.3	0.7	0.9	1.8	1.0	12	0.5	1.2	1.9	1.2	12.0		
3	P3 40m East of	Insoluble Solids Ash	6.1 4.5	3.9 2.4	5.6 2.2	7.2	9.3 6.2	24.3 18.0	29.3 21.7	12.4 3.4	6.0 4.0	2.6	6.4 4.6	2.2	12 12	2.2	9.7 6.6	29.3 21.7	9.7	15.0		
	BPB Stockvard	Combustible Matter	4.5	1.5	3.4	4.6	3.1	6.3	7.6	3.0	2.0	0.9	1.8	0.7	12	0.7	3.1	7.6	3.1	12.0		
4	P4	Insoluble Solids	2.6	3.0	5.6	23.1	10.6	7.8	7.2	137.0	4.8	3.2	12.3	2.8	12	2.6	18.3	137.0	18.3	15.0		
	40m East Coal Berth	Ash	1.2	1.5	2.2	4.1	1.1 8.0	3.4 4.4	3.2 4.0	1.2	1.7	1.5	2.3	1.5	12	1.1	2.1	4.1	5.0	12.0		
5	Stockyard P5	Combustible Matter Insoluble Solids	1.4 7.2	1.5	4.8	19.0 3.5	2.7	4.4	4.0	2.2	3.1 5.6	3.3	7.3	1.3	12	1.3	5.0 4.5	19.0 7.3	4.5	12.0		
-	Northern Pond	Ash	1.8	2.0	1.9	1.2	1.1	2.1	1.2	1.2	3.6	1.4	3.0	1.6	12	1.1	1.8	3.6				
	(No.1)	Combustible Matter	5.4	3.8	2.9	2.3	1.6	2.2	1.5	2.2	2.0	1.9	4.3	1.8	12	1.5	2.7	5.4	2.7	12.0		
6	P6 40m West Coal Berth	Insoluble Solids Ash	8.1 3.4	8.1 3.7	6.0 3.2	3.8	2.0	6.6 4.4	4.8 3.2	3.6	9.9 4.5	4.0		5.5 2.6	11	2.0	5.7	9.9 4.5	5.7	15.0		
	Stockyard	Combustible Matter	4.7	4.4	2.8	1.7	0.8	2.2	1.6	1.6	5.4	2.4		2.0	11	0.8	2.8	5.4	2.8	12.0		
7	P7	Insoluble Solids	1.9	4.7	3.1	3.7	1.4	4.5	1.8	2.5	4.9	4.4	10.1	6.2	12	1.4	4.1	10.1	4.1	15.0		
	260m West No.2 Coalberth	Ash	1.2	3.0	2.0	0.6	1.1 0.3	3.5 1.0	1.5 0.3	1.8	1.0	2.9	8.2	4.9	12 12	0.6	2.6	8.2	1.5	12.0		
8	P8	Combustible Matter Insoluble Solids	7.0	4.1	7.7	15.6	16.7	1.0	30.8	33.1	16.0	5.0	26.3	7.8	12	4.1	1.5	33.1	1.5	12.0		
-	PKCT North	Ash	2.4	1.6	2.3	3.7	2.7	5.2	5.4	5.6	12.6	1.4	7.6	2.4	12	1.4	4.4	12.6				
	Truckwash	Combustible Matter	4.6	2.5	5.4	11.9	14.0	14.6	25.4	27.5	3.4	3.6	19.3	5.4	12	2.5	11.5	27.5	11.5	12.0		
э	P9 Wollongong	Insoluble Solids Ash	2.4	2.8	2.6	2.6	1.4	3.0 1.8	2.0	1.8 0.6	0.9	2.6	3.7	2.2	12 12	0.9	2.3	3.7	2.3	6.0		
	Wastewater TP.	Combustible Matter	1.4	1.3	1.3	1.3	0.9	1.2	1.1	1.2	0.5	1.5	1.7	1.0	12	0.5	1.2	1.7	1.2	4.0		
15	P10	Insoluble Solids	7.6	6.4	6.9	6.0	6.0	11.2	6.3	6.5	7.8	6.7	11.5	6.1	12	6.0	7.4	11.5	7.4	15.0		
	North of PKCT Planning Office	Ash Combustible Matter	2.9	2.9	3.4	3.3	3.1	6.1 5.1	3.7	3.5	4.9	2.9	4.5	3.0	12 12	2.9 2.6	3.7	6.1 7.0	3.7	12.0		
17	Planning Orrice	Insoluble Solids	3.4	3.7	3.4	3.0	0.9	5.7	1.3	1.4	2.6	2.9	5.1	4.3	12	0.3	3.1	5.7	3.1	6.0		
	Entry Gate BlueScope	Ash	2.6	3.0	2.6	2.3	0.6	4.3	1.0	1.0	0.6	2.3	4.0	3.2	12	0.6	2.3	4.3				
	RO.RO Berth (109)	Combustible Matter	0.8	0.7	0.8	0.7 THLY B	0.3	1.4	0.3	0.4 ARY OF	2.0	0.6	1.1	1.1	12	0.3	0.9	2.0	0.9	4.0		
Note 1:	there are no EPL air quali	lity limits in the EPL for industrial	monitoring	sites. His									opted to a	assess ag	ainst actual	l results to	o facilitato	perform:	ance impro	vement.		
s	AMPLE PERIOD	Date Sampled	Date F	Results Ol	otained	Da	ate Publish	red	COMME	NTARY O	N RESUL	LTS										
	January 2018	02/02/2018	1	9/02/201	8	1	One Site "P4" marginally outside annual average assessment criteria for insoluble solids and combustible m dust levels were low. Annual average remains outside criteria as a result of some high monthly readings earlie month averaging period.															
	February 2018	02/03/2018	2	6/03/20 [.]	18	27/03/2018			One Site "P4" marginally outside annual average assessment criteria for incoluble solids and combustible matter. February dust levels were low. Annual average remains outside criteria as a result of some high monthly readings earlier in the 12 month averaging period.													
	March 2018	03/04/2018	1	8/04/201	8	1	18/04/201	8							ent criteria e high mon'					vere low. aging period.		
	April 2018	01/05/2018	1	8/05/201	8		21/05/201	8	and likely	"P4" marg influenced eadings ea	l by perio	ods of str	ong weste	rly winds.	. Annual ave	for insolu erage rem:	ble solids ains outsi	. April du de criteria	st levels w as a result	ere moderate : of some high		
	May 2018	01/06/2018	1	9/06/201	8	1	19/06/201	One Site "P4" marginally outside annual average assessment criteria for insoluble solids. May dust levels were moderate and likely influenced by periods of strong westerly winds. Annual average remains outside criteria as a result of some high monthly readings earlier in the 12 month averaging period.														
	June 2018	02/07/2018	1	6/07/201	8		16/07/201	8	and likely	influenced	l by perio	ds of str	ong weste	rly winds.	Annual avo					re moderate of some high		
				22/08/2018 28/08/2018			monthly readings earlier in the 12 month averaging period. All Sites within assessment criteria															
	July 2018	02/08/2018	2	2/08/20	18	2	28/08/201	0	THE ORCE	within asse	ssiment c		03/03/2018 21/03/2018 21/03/2018 One Site "P4" marginally outside annual average assess august likely to have influenced results.				nent criteria for insoluble solids. Strong westerly winds during					
	July 2018 August 2018								One Site	"P4" marg	inally out	side annu		assessmi	ent criteria	for insolu	ble solids	. Strong v	vesterly wi	nds during		
			2		8	1		8	One Site august lik One Site	"P4" marg ely to have "P4" marg	inally out e influenc inally out	tside annu ed results tside annu	al average	assessme	ent criteria	for insolu	ble solids	in Septer	nber. Sept	nds during ember's dust igust 2018.		
	August 2018	03/09/2018	2	1/09/201	8	3	21/09/201	8	One Site august lik One Site levels at One Site	"P4" marg iely to have "P4" marg Site P4 we "P4" marg	inally out e influenc inally out re low. Tl inally out	tside annu ed results tside annu he high an tside annu	al average nual average al average	assessmi ge is influ assessmi	ent criteria enced by a	for insolu single hig for insolu	ble solids h measure ble solids	in Septer ment reco	nber. Sept orded in Av	ember's dust igust 2018. r's dust levels		
	August 2018 September 2018	03/09/2018 03/10/2018	2 2 2 1	:1/09/201 :3/10/201	8	2 2	21/09/201 23/10/201	8	One Site august lik One Site levels at 3 One Site at Site Pa Two site:	"P4" marg iely to have "P4" marg Site P4 we "P4" marg 4 were low	inally out e influenc inally out re low. Tl inally out . The high y outside	side annu ed results side annu he high an side annu annual av	al average nual average al average verage is in verage ass	: assessmo ge is influ : assessmo nfluenced essment c	ent criteria enced by a ent criteria by a single criteria for i	for insolu single hig for insolu high mea:	ble solids h measure ble solids surement i	in Septer ment reco in Octob recorded	nber. Sept orded in Av er. Octobe in August :	ember's dust igust 2018. r's dust levels		

Publish Date: 16th January 2018



LTD.



EP	L MONITORIN	G SITES- RESIDENTIAL	Calendar Year 2018													annual aver	age: grams per			
		MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					square n	netre.month
EPL No.	Location Analysis: grams/square Gauge Number metre.month										No. samples collected	MIN	MEAN	MAX	rolling 12 month average	PKCT assessment criteria				
12	R1	Insoluble Solids	1.0	1.1	1.2	1.2	0.1	0.7	0.2	0.6	0.8	0.7	1.5	1.0	12	0.1	0.8	1.5	0.8	4.0
	157 Church St	Ash	0.7	0.8	0.7	0.9	0.1	0.6	0.2	0.4	0.3	0.4	1.0	0.6	12	0.1	0.6	1.0		
	Wollongong	Combustible Matter	0.3	0.3	0.5	0.3	<0.1	0.1	<0.1	0.2	0.5	0.3	0.5	0.4	10	0.1	0.3	0.5	0.3	2.0
19	R2	Insoluble Solids	2.2	1.2	2.1	1.1	0.1	0.7	0.3	0.6	0.8	0.7	1.6	1.1	12	0.1	1.0	2.2	1.0	4.0
	Vikings Oval	Ash	1.3	0.8	1.0	0.7	0.1	0.5	0.2	0.4	0.4	0.2	1.0	0.4	12	0.1	0.6	1.3		
	Wollongong	Combustible Matter	0.9	0.4	1.1	0.4	<0.1	0.2	0.1	0.2	0.4	0.5	0.6	0.7	11	0.1	0.5	1.1	0.5	2.0
TBA	R3	Insoluble Solids	0.8	1.4	1.4	1.0	0.5	0.9	0.5	0.7	0.6	0.6	1.8	1.2	12	0.5	1.0	1.8	1.0	4.0
	Ross Street	Ash	0.5	1.0	0.8	0.7	0.4	0.7	0.3	0.4	0.2	0.5	1.3	0.4	12	0.2	0.6	1.3		
	Wollongong	Combustible Matter	0.3	0.4	0.6	0.3	0.1	0.2	0.2	0.3	0.4	0.1	0.5	0.8	12	0.1	0.4	0.8	0.4	2.0

Note 1: Assessment criter	te 1: Assessment criteria is based on an EPA guideline of annual average of 4 grams per square metre per month for residential areas. PKCT has adopted a level of 2 grams per square metre for combustible matter for assessment purposes.											
SAMPLE PERIOD	Date Sampled	Date Results Obtained	Date Published	COMMENTARY								
January 2018	02/02/2018	19/02/2018	19/02/2018	All sites within assessment criteria.								
February 2018	02/03/2018	26/03/2018	27/03/2018	All sites within assessment criteria.								
March 2018	03/04/2018	18/04/2018	18/04/2018	All sites within assessment criteria.								
April 2018	01/05/2018	18/05/2018	21/05/2018	All sites within assessment criteria.								
May 2018	01/06/2018	19/06/2018	19/06/2018	All sites within assessment criteria.								
June 2018	02/07/2018	16/07/2018	16/07/2018	All sites within assessment criteria.								
July 2018	02/08/2018	22/08/2018	28/08/2018	All sites within assessment criteria.								
August 2018	03/09/2018	21/09/2018	21/09/2018	All sites within assessment criteria.								
September 2018	03/10/2018	23/10/2018	23/10/2018	All sites within assessment criteria.								
October 2018	02/11/2018	29/11/2018	30/11/2018	All sites within assessment criteria.								
November 2018	04/12/2018	18/12/2018	19/12/2018	All sites within assessment criteria.								
December 2018	04/01/2019	16/01/2019	16/01/2019	All sites within assessment criteria.								



LTD.



	SETTLEMENT LAGOON OVERFLOW: ENVIRONMENT PROTECTION LICENCE MONITORING: POINT 16										
Environment Protection Licence: 1625		water qu	ality parameter	EPL Limit (100 percentile)							
Type of Monitor	ing: water qual	ity		pН	monitoring only						
Frequency: daily grab sample when			total sus	pended solids	less than 50						
			(millig	rams per litre)	not visible						
Sample Date	Date Results Obtained	Date Published	pH (pH units)	total suspended solids (milligrams per litre)	oil/ grease (milligrams per litre)	Commentary on Results					
02/09/2017	20/11/2017	20/11/2017	7.0	17	not visible	September's results were accidently omitted from last months report. Data EPL compliant					
06/11/2017	20/11/2017	20/11/2017	9.5	31	not visible	EPL compliant					
08/11/2017	20/11/2017	20/11/2017	9.0	26	not visible	EPL compliant					
20/11/2017	15/12/2017	15/12/2017	8.4	20	not visible	EPL compliant					
				No overflo	ws from LDP16 in December 17						
10/01/2018	19/02/2018	19/02/2018	8.0	<5	not visible	EPL compliant					
14/01/2018	19/02/2018	19/02/2018	7.7	16	not visible	EPL compliant					
20/02/2018	26/03/2018	27/03/2018	8.9	21	not visible	EPL compliant					
25/02/2018	26/03/2018	27/03/2018	9.1	34	not visible	EPL Compliant. Note - two samples were inadvertently taken during the overflow on the 25th. One sample recorded TSS of 54, the other was 14. Average of two values has been taken for reporting purposes.					
26/02/2018	26/03/2018	27/03/2018	8.8	31	not visible	EPL compliant					
21/03/2018	18/04/2018	18/04/2018	9.0	11	not visible	EPL compliant					
22/03/2018	18/04/2018	18/04/2018	8.8	6	not visible	EPL compliant					
					erflows from LDP16 in April 18 erflows from LDP16 in May 18						
06/06/2018	16/07/2018	16/07/2018	8.2	<5	notvisible	EPL compliant					
19/06/2018	16/07/2018	16/07/2018	8.1	6	notvisible	EPL compliant					
21/06/2018	16/07/2018	16/07/2018	7.8	<5	notvisible	EPL compliant					
27/06/2018	16/07/2018	16/07/2018	8.5	<5	notvisible	EPL compliant					
29/06/2018	16/07/2018	16/07/2018	8.4	<5	notvisible	EPL compliant					
05/07/2018	22/08/2018	28/08/2018	7.7	5	notvisible	EPL compliant					
00.01.2010	22.00.2010	20.00.2010			flows from LDP16 in August 18						
03/09/2018	23/10/2018	23/10/2018	9.8	12	notvisible	EPL compliant					
04/09/2018	23/10/2018	23/10/2018	9.9	12	notvisible	EPL compliant					
05/09/2018	23/10/2018	23/10/2018	10.0	16	not visible	EPL compliant					
06/09/2018	23/10/2018	23/10/2018	10.2	19	notvisible	EPL compliant					
07/09/2018	23/10/2018	23/10/2018	10.2	30	not visible	EPL compliant					
13/09/2018	23/10/2018	23/10/2018	9.4	10	not visible	EPL compliant					
08/09/2018	23/10/2018	23/10/2018	9.3	14	notvisible	EPL compliant					
20/09/2018	23/10/2018	23/10/2018	9.8	15	notvisible	EPL compliant					
21/09/2018	23/10/2018	23/10/2018	9.8	12	notvisible	EPL compliant					
04/10/2018	29/11/2018	30/11/2018	10.0	15	not visible	EPL compliant					
05/10/2018	29/11/2018	30/11/2018	9.4	16	not visible	EPL compliant					
08/10/2018	29/11/2018	30/11/2018	8.3	6	notvisible	EPL compliant					
09/10/2018	29/11/2018	30/11/2018	7.9	5	notvisible	EPL compliant					
10/10/2018	29/11/2018	30/11/2018	7.7	<5	notvisible	EPL compliant					
11/10/2018	29/11/2018	30/11/2018	7.9	<5	notvisible	EPL compliant					
15/10/2018	29/11/2018	30/11/2018	9.6	12	notvisible	EPL compliant					
	ned" refers to th										

NB TSS (total suspended solids) - under EPL, a TSS water quality limit of 50mg/litre pertains. Exceedance of this limit is permitted when discharge occurs solely as a result of rainfall measured at the premises. For discharge to be considered to occur solely as a result of rainfall, the rainfall must exceed a 5 day rainfall depth value of 90 mm over a consecutive 5 day period.



LTD.



			SETTI EMENT	LAGOON OVERELOW: F	INVIRONMENT PROTECTION LICEN	CE MONITORING: POINT 16
Environment P	rotection Licer	nce: 1625		uality parameter	EPL Limit (100 percentile)	
Type of Monitoring: water quality Frequency: daily grab sample when discharging		total su	pH spended solids pil/grease	monitoring only less than 50 not visible		
Sample Date	Date Results Obtained	Date Published	pH (pH units)	total suspended solids (milligrams per litre)	oil/ grease (milligrams per litre)	Commentary on Results
03/11/2018	18/12/2018	19/12/2018	10.3	16	not visible	EPL compliant
07/11/2018	18/12/2018	19/12/2018	10.1	21	not visible	EPL compliant
08/11/2018	18/12/2018	19/12/2018	9.7	11	not visible	EPL compliant
13/11/2018	18/12/2018	19/12/2018	10.0	22	not visible	EPL compliant
16/11/2018	18/12/2018	19/12/2018	10.4	26	not visible	EPL compliant
17/11/2018	18/12/2018	19/12/2018	9.3	23	not visible	EPL compliant
27/11/2018	18/12/2018	19/12/2018	10.8	28	not visible	EPL compliant
28/11/2018	18/12/2018	19/12/2018	9.8	38	not visible	EPL compliant
29/11/2018	18/12/2018	19/12/2018	8.9	28	not visible	EPL compliant
30/11/2018	18/12/2018	19/12/2018	9.2	21	not visible	EPL compliant
07/12/2018	16/01/2019	16/01/2019	9.2	13	not visible	EPL compliant
14/12/2018	16/01/2019	16/01/2019	9.3	10	not visible	EPL compliant
15/12/2018	16/01/2019	16/01/2019	8.2	14	not visible	EPL compliant
20/12/2018	16/01/2019	16/01/2019	8.1	17	not visible	EPL compliant
23/12/2018	16/01/2019	16/01/2019	7.3	8	not visible	EPL compliant
26/12/2018	16/01/2019	16/01/2019	7.9	5	not visible	EPL compliant
* "Date Publishe	d" refers to this r	report.				

NB TSS (total suspended solids) - under EPL, a TSS water quality limit of 50mg/litre pertains. Exceedance of this limit is permitted when discharge occurs solely as a result of rainfall measured at the premises. For discharge to be considered to occur solely as a result of rainfall, the rainfall must exceed a 5 day rainfall depth value of 90 mm over a consecutive 5 day period.



LTD.



	PKCT Sedimentation Pond Overflows - EPL 1625													
	Ponds location/names: TS1 pond: DP22, Central Pond: DP23, Tower 3 pond: DP24, South Pond: DP25, Workshop Pond DP26. Type of Monitoring: Water quality Frequency: Daily when discharging													
Sample Location	Sample Location Date Results Date Results Date Results Date (pH units) pH (pH units) Total Suspended Solids (milligrams per litre) Oil/ Grease (milligrams per litre) Sample Location Obtained Date Results Date (pH units) pH (pH units) Total Suspended Solids (milligrams per litre) Oil/ Grease (milligrams per litre)													
	No overflows from any ponds in January 2018													
	No overflows from any ponds in February 2018													
	No overflows from any ponds in March 2018													
					rflows from any ponds in A									
					erflows from any ponds in I									
	No overflows from any ponds in June 2018													
	No overflows from any ponds in July 2018													
					flows from any ponds in A									
					ows from any ponds in Sep									
					lows from any ponds in O									
					ows from any ponds in No									
				No overfl	ows from any ponds in Dec	ember 2018								



LTD.



Water Collection System- Aerial View



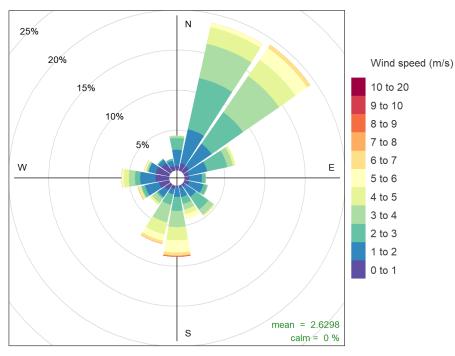
Nb South, Tower 3, Central, Workshop, North, TS1 pond and C7 pump collect site runoff for transfer to the settlement lagoon for treatment, reuse and harbour discharge.



LTD.

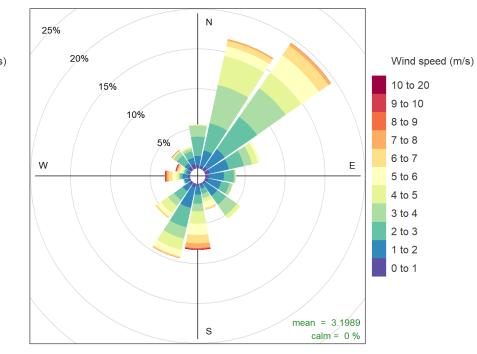


WIND ROSES – December 2018



Northern monitor

Frequency of counts by wind direction (%)



Frequency of counts by wind direction (%)

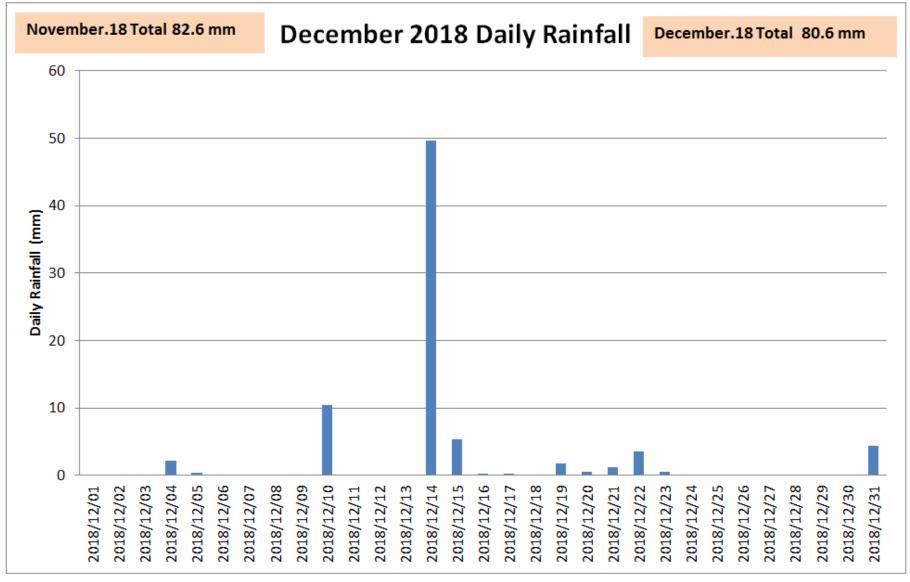
Southern monitor



LTD.



RAINFALL (PKCT site gauge)



Environment Protection Licence 1625 Monthly Report: December 2018

Publish Date: 16th January 2018