PORT KEMBLA COAL TERMINAL 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
PKCT EPA Public Register	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=1625&id=1625&option=licence&searchrange=general&range=POEO licence&prp=no&status=Issued
Location:	Port Kembla Road, Port Kembla Inner Harbour, Wollongong
Postal Address:	PO Box 823, Wollongong East 2502

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

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

PORT KEMBLA COAL TERMINAL LTD.

EPL MONITORING SITES- INDUSTRIAL			Calendar Year 2020															Annual average: grams per square metre.month	
Monthly Analysis		MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
EPL No.	Location Gauge Number	analysis: grams/square metre.month													Samples collected	MIN	MEAN	MAX	rolling 12 month average	PKCT assessment criteria
1	P1	Insoluble Solids	10.5	1.6	3.2	4.4	4.8								5	1.6	4.9	10.5	4.6	15.0
	25m South	Ash	8.7	1.0	2.1	3.2	3.2								5	1.0	3.6	8.7		
	BPB Coal Berth	Combustible Matter	1.8	0.6	1.1	1.2	0.9								5	0.6	1.1	1.8	1.2	12.0
2	P2	Insoluble Solids	8.3	2.6	3.0	2.5	5.0								5	2.5	4.3	8.3	3.7	15.0
	40m South of	Ash	6.6	1.6	2.0	1.9	4.1								5	1.6	3.2	6.6		
	BPB Stockyard	Combustible Matter	1.7	1.0	1.0	0.6	0.9								5	0.6	1.0	1.7	1.1	12.0
3	P3	Insoluble Solids	9.7	6.5	5.6	6.5	6.6								5	5.6	7.0	9.7	8.6	15.0
	40m East of	Ash	7.9	5.1	3.4	4.7	4.6								5	3.4	5.1	7.9		
	BPB Stockyard	Combustible Matter	1.8	1.4	2.2	1.8	2.0								5	1.4	1.8	2.2	2.4	12.0
4	P4	Insoluble Solids	9.7	5.2	4.2	3.6	3.8								5	3.6	5.3	9.7	6.2	15.0
	40m East Coal Berth	Ash	7.9	1.5	2.3	1.3	2.0								5	1.3	3.0	7.9		
	Stockyard	Combustible Matter	1.8	3.7	1.9	2.3	1.8								5	1.8	2.3	3.7	3.2	12.0
5	P5	Insoluble Solids	10.9	8.9	12.8	2.7	3.7								5	2.7	7.8	12.8	7.2	15.0
	Northern Pond	Ash	7.2	3.8	3.4	0.8	1.3								5	0.8	3.3	7.2		
	(No.1)	Combustible Matter	3.7	5.1	9.4	1.9	2.4								5	1.9	4.5	9.4	4.1	12.0
6	P6	Insoluble Solids	12.0	3.1	7.8	1.4	1.6								5	1.4	5.2	12.0	7.0	15.0
	40m West Coal Berth	Ash	8.8	1.4	4.1	0.9	1.1								5	0.9	3.3	8.8		
	Stockyard	Combustible Matter	3.2	1.7	3.7	0.5	0.5								5	0.5	1.9	3.7	3.0	12.0
7	P7	Insoluble Solids	11.7	2.7	5.0	1.2	1.8								5	1.2	4.5	11.7	3.9	15.0
	260m West No.2	Ash	8.9	1.6	3.0	0.8	1.3								5	0.8	3.1	8.9		
	Coalberth	Combustible Matter	2.8	1.1	2.0	0.4	0.5								5	0.4	1.4	2.8	1.3	12.0
8	P8	Insoluble Solids	14.1	5.4	8.5	15.7	9.1								5	5.4	10.6	15.7	18.7	15.0
	PKCT North	Ash	8.2	1.8	2.7	2.6	2.4								5	1.8	3.5	8.2		
	Truckwash	Combustible Matter	5.9	3.6	5.8	13.1	6.7								5	3.6	7.0	13.1	13.8	12.0
9	P9	Insoluble Solids	9.6	1.6	3.6	0.7	1.4								5	0.7	3.4	9.6	3.1	6.0
	Wollongong	Ash	7.3	0.8	1.6	0.4	0.7								5	0.4	2.2	7.3		
	Wastewater TP.	Combustible Matter	2.3	0.8	2.0	0.3	0.7								5	0.3	1.2	2.3	1.4	4.0
15	P10	Insoluble Solids	17.6	6.0	7.7	2.6	6.3								5	2.6	8.0	17.6	8.5	15.0
	North of PKCT	Ash	11.7	2.5	3.4	1.2	3.9								5	1.2	4.5	11.7		
	Planning Office	Combustible Matter	5.9	3.5	4.3	1.4	2.4								5	1.4	3.5	5.9	4.0	12.0
17	P11	Insoluble Solids	BB	4.4	4.3	2.0	3.4								4	2.0	3.5	4.4	3.5	6.0
	Entry Gate BlueScope	Ash	BB	3.4	3.6	1.5	2.9								4	1.5	2.9	3.6		
	RO.RO Berth (109)	Combustible Matter	BB	1.0	0.7	0.5	0.5								4	0.5	0.7	1.0	0.7	4.0

MONTHLY REPORT: COMMENTARY ON RESULTS

Note 1: there are no EPL air quality limits in the EPL for industrial monitoring sites. Historical information provides baseline data and assessment criteria has been adopted to assess against actual results to facilitate performance improvement.

SAMPLE PERIOD	Date Sampled	Date Results Obtained	Date Published	COMMENTARY ON RESULTS
January 2020	04/02/2020	24/02/2020	26/02/2020	All sites measured higher than usual deposition during January. The high levels are attributed to the extreme weather conditions and constant smoke haze caused by the NSW bushfires. Sample Site P11 was found on the ground with a broken bottle following a wind storm in January. No sample was collected at Site P11 as a result. One site, "P8" marginally outside rolling annual average assessment criteria for insoluble solids and combustible matter. Site "P8", located near the truckwash is marginally outside the criteria as a result of a few readings across the last 12 months. There have been some recent dust mitigation strategies installed at the truckwash to reduce dust levels in this location. January particulate levels were low compared to previous months.
February 2020	04/03/2020	20/03/2020	23/03/2020	One site, "P8" marginally outside rolling annual average assessment criteria for insoluble solids and combustible matter. Site "P8", located near the truckwash is marginally outside the criteria as a result of a few readings across the last 12 months. There have been some recent dust mitigation strategies installed at the truckwash to reduce dust levels in this location. February particulate levels were very low.
March 2020	02/04/2020	16/04/2020	16/04/2020	One site, "P8" marginally outside rolling annual average assessment criteria for insoluble solids and combustible matter. Site "P8", located near the truckwash is marginally outside the criteria as a result of a few readings across the last 12 months. March particulate levels were very low.
April 2020	04/05/2020	19/05/2020	19/05/2020	One site, "P8" marginally outside rolling annual average assessment criteria for insoluble solids and combustible matter. Site "P8", located near the truckwash is marginally outside the criteria as a result of a few readings across the last 12 months. April particulate levels were moderate.
May 2020	02/06/2020	22/06/2020	23/06/2020	One site, "P8" marginally outside rolling annual average assessment criteria for insoluble solids and combustible matter. Site "P8", located near the truckwash is marginally outside the criteria as a result of a few readings across the last 12 months. May particulate levels were moderate.

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EPL MONITORING SITES- RESIDENTIAL			Calendar Year 2020												Monthly Analysis				annual average: grams per square metre.month	
		MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC						
EPL No.	Location Gauge Number	Analysis: grams/square metre.month													No. samples collected	MIN	MEAN	MAX	rolling 12 month average	PKCT assessment criteria
12	R1	Insoluble Solids	7.7	1.0	1.0	0.4	3.4								5	0.4	2.7	7.7	1.6	4.0
	157 Church St	Ash	6.6	0.7	0.8	0.2	2.9								5	0.2	2.2	6.6		
	Wollongong	Combustible Matter	1.1	0.3	0.2	0.2	0.5								5	0.2	0.5	1.1	0.3	2.0
19	R2	Insoluble Solids	8.4	0.6	0.6	0.3	0.3								5	0.3	2.0	8.4	1.9	4.0
	Vikings Oval	Ash	6.4	0.4	0.3	0.1	0.2								5	0.1	1.5	6.4		
	Wollongong	Combustible Matter	2.0	2.0	0.3	0.2	0.1								5	0.1	0.9	2.0	0.8	2.0
TBA	R3	Insoluble Solids	8.6	1.9	0.6	0.3	0.3								5	0.3	2.3	8.6	1.6	4.0
	Ross Street	Ash	7.2	1.4	0.4	0.1	0.1								5	0.1	1.8	7.2		
	Wollongong	Combustible Matter	1.4	0.5	0.2	0.2	0.2								5	0.2	0.5	1.4	0.4	2.0

MONTHLY REPORT: COMMENTARY ON RESULTS

Note 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 2020	04/02/2020	24/02/2020	26/02/2020	All sites measured higher than usual deposition during January. The high levels are attributed to the extreme weather conditions and constant smoke haze caused by the NSW bushfires. All sites within assessment criteria.
February 2020	04/03/2020	20/03/2020	23/03/2020	All sites within assessment criteria.
March 2020	02/04/2020	16/04/2020	16/04/2020	All sites within assessment criteria.
April 2020	04/05/2020	19/05/2020	19/05/2020	All sites within assessment criteria.
May 2020	02/06/2020	22/06/2020	23/06/2020	All sites within assessment criteria.
June 2020				
July 2020				
August 2020				
September 2020				
October 2020				
November 2020				
December 2020				

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SETTLEMENT LAGOON OVERFLOW: ENVIRONMENT PROTECTION LICENCE MONITORING: Licenced Discharge POINT 16						
Environment Protection Licence: 1625 Type of Monitoring: water quality Frequency: daily grab sample when discharging			**water quality parameter** pH total suspended solids (mg/L) oil/ grease (milligrams per litre)		**EPL Limit (100 percentile)** 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
17/01/2020	24/02/2020	26/02/2020	8.8	62	not visible	TSS marginally exceeded EPL limit. Two samples were taken and the second sample recorded TSS of 59mg/L TSS. Exceedance has been reported to EPA. Action plan has been developed and implementation of the plan is underway.
22/01/2020	24/02/2020	26/02/2020	10.0	20	not visible	EPL compliant
23/01/2020	24/02/2020	26/02/2020	10.0	26	not visible	EPL compliant
24/01/2020	24/02/2020	26/02/2020	9.5	18	not visible	EPL compliant
04/02/2020	20/03/2020	23/03/2020	8.1	15	not visible	EPL compliant
05/02/2020	20/03/2020	23/03/2020	7.5	8	not visible	EPL compliant
06/02/2020	20/03/2020	23/03/2020	7.8	10	not visible	EPL compliant
07/02/2020	20/03/2020	23/03/2020	7.2	25	not visible	EPL compliant
08/02/2020	20/03/2020	23/03/2020	7.3	6	not visible	EPL compliant
09/02/2020	20/03/2020	23/03/2020	7.4	12	not visible	EPL compliant
10/02/2020	20/03/2020	23/03/2020	7.5	19	not visible	EPL compliant
12/02/2020	20/03/2020	23/03/2020	7.3	<5	not visible	EPL compliant
13/02/2020	20/03/2020	23/03/2020	7.0	<5	not visible	EPL compliant
14/02/2020	20/03/2020	23/03/2020	7.1	6	not visible	EPL compliant
16/02/2020	20/03/2020	23/03/2020	7.4	<5	not visible	EPL compliant
17/02/2020	20/03/2020	23/03/2020	7.2	6	not visible	EPL compliant
18/02/2020	20/03/2020	23/03/2020	7.5	7	not visible	EPL compliant
19/02/2020	20/03/2020	23/03/2020	7.3	9	not visible	EPL compliant
20/02/2020	20/03/2020	23/03/2020	7.2	5	not visible	EPL compliant
04/03/2020	16/04/2020	16/04/2020	9.2	6	not visible	EPL compliant
05/03/2020	16/04/2020	16/04/2020	9.8	8	not visible	EPL compliant
08/03/2020	16/04/2020	16/04/2020	7.3	10	not visible	EPL compliant
09/03/2020	16/04/2020	16/04/2020	7.6	11	not visible	EPL compliant
10/03/2020	16/04/2020	16/04/2020	7.2	<5	not visible	EPL compliant
01/04/2020	19/05/2020	19/05/2020	8.6	18	not visible	EPL compliant
02/04/2020	19/05/2020	19/05/2020	7.6	16	not visible	EPL compliant
04/04/2020	19/05/2020	19/05/2020	8.3	7	not visible	EPL compliant
28/04/2020	19/05/2020	19/05/2020	10.4	28	not visible	EPL compliant
29/04/2020	19/05/2020	19/05/2020	10.2	47	not visible	EPL compliant
30/04/2020	19/05/2020	19/05/2020	9.9	26	not visible	EPL compliant
* "Date Published" refers to this 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.

PORT KEMBLA COAL TERMINAL LTD.

SETTLEMENT LAGOON OVERFLOW: ENVIRONMENT PROTECTION LICENCE MONITORING: Licenced Discharge POINT 16						
Environment Protection Licence: 1625 Type of Monitoring: water quality Frequency: daily grab sample when discharging			**water quality parameter**		**EPL Limit (100 percentile)**	
			pH		monitoring only	
			total suspended solids (mg/L)		less than 50	
			oil/ grease (milligrams 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
01/05/2020	22/06/2020	23/06/2020	9.6	21	<5	EPL compliant
16/05/2020	22/06/2020	23/06/2020	9.8	30	5.0	EPL compliant
21/05/2020	22/06/2020	23/06/2020	10.6	28	5.0	EPL compliant
22/05/2020	22/06/2020	23/06/2020	9.3	12	<5	EPL compliant
23/05/2020	22/06/2020	23/06/2020	7.2	5	<5	EPL compliant
25/05/2020	22/06/2020	23/06/2020	7.6	6	<5	EPL compliant
26/05/2020	22/06/2020	23/06/2020	7.8	<5	<5	EPL compliant
* "Date Published" refers to this 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.

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2020 PKCT Sedimentation Pond Overflows - EPL 1625

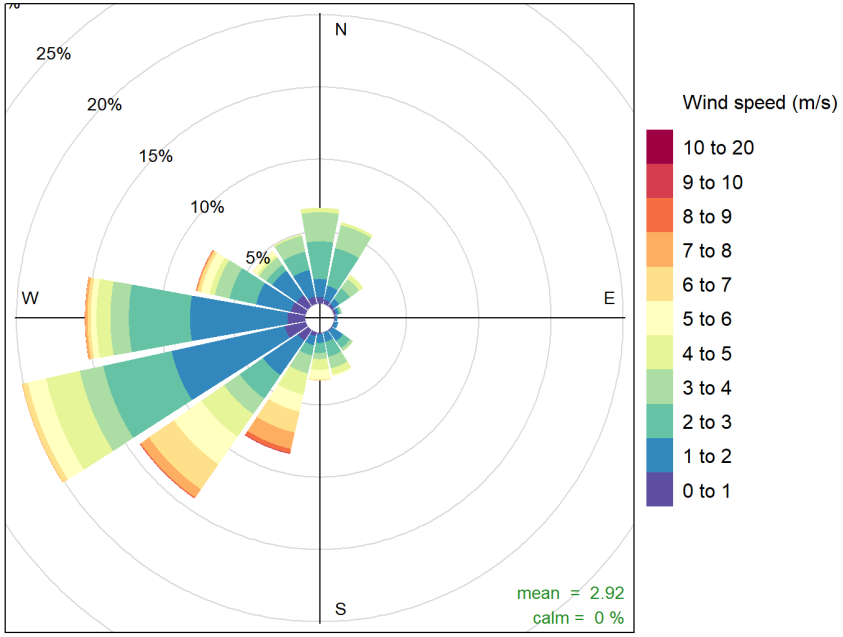
Ponds location/names: TS1 pond: DP22, Central Pond: DP23, Tower 3 pond: DP24, South Pond: DP25, Workshop Pond DP26, Berth 102 DP27.

Sample Location	Sample Date	Date Results Obtained	Date Results Published	pH (pH units) Criteria: Monitoring only	Total Suspended Solids (milligrams per litre) Criteria: Monitoring only	Oil/ Grease (milligrams per litre) Criteria: Monitoring only	Commentary on Results
No overflows from any satellite ponds in January 2020							
DP24 - Tower 3 Pond	09/02/2020	18/02/2020	23/03/2020	8.6	509	not visible	Overflow of Tower 3 Pond occurred during very large rain event in February. Over 173mm of rainfall fell across a four day period from 7th to 10th February. Pond sediment levels were below the required 20% and no pump failures occurred. Pond and pump capacity could not keep up with the inflows. Discharge is permitted under PKCT's licence conditions.
DP23 - Central Pond	09/02/2020	24/02/2020	23/03/2020	8.2	290	not visible	Overflow of Central Pond occurred during very large rain event in February. Over 173mm of rainfall fell across a four day period from 7th to 10th February. Pond sediment levels were below the required 20% and no pump failures occurred. Pond and pump capacity could not keep up with the inflows. Discharge is permitted under PKCT's licence conditions.
DP23 - Central Pond	10/02/2020	19/02/2020	23/03/2020	7.5	153	not visible	Overflow of Central Pond occurred during very large rain event in February. Over 173mm of rainfall fell across a four day period from 7th to 10th February. Pond sediment levels were below the required 20% and no pump failures occurred. Pond and pump capacity could not keep up with the inflows. Discharge is permitted under PKCT's licence conditions.
DP25 - Southern Pond	10/02/2020	18/02/2020	23/03/2020	7.7	51	not visible	Overflow of Southern Pond occurred during very large rain event in February. Over 173mm of rainfall fell across a four day period from 7th to 10th February. Pond sediment levels were below the required 20% and no pump failures occurred. Pond and pump capacity could not keep up with the inflows. Discharge is permitted under PKCT's licence conditions.
No overflows from any satellite ponds in March 2020							
No overflows from any satellite ponds in April 2020							
No overflows from any satellite ponds in May 2020							

PKCT Water Collection System Discharge Points

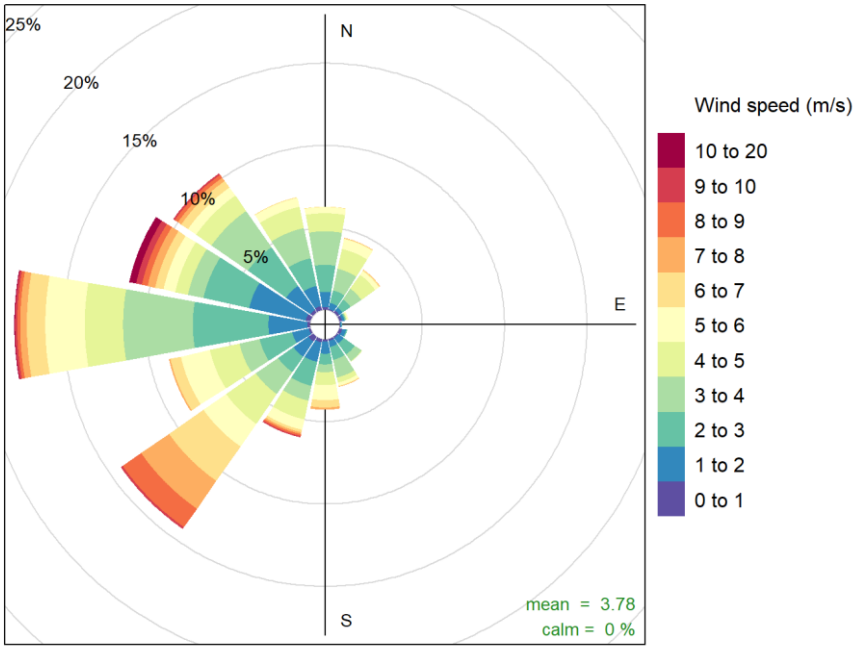
WIND ROSES – May 2020

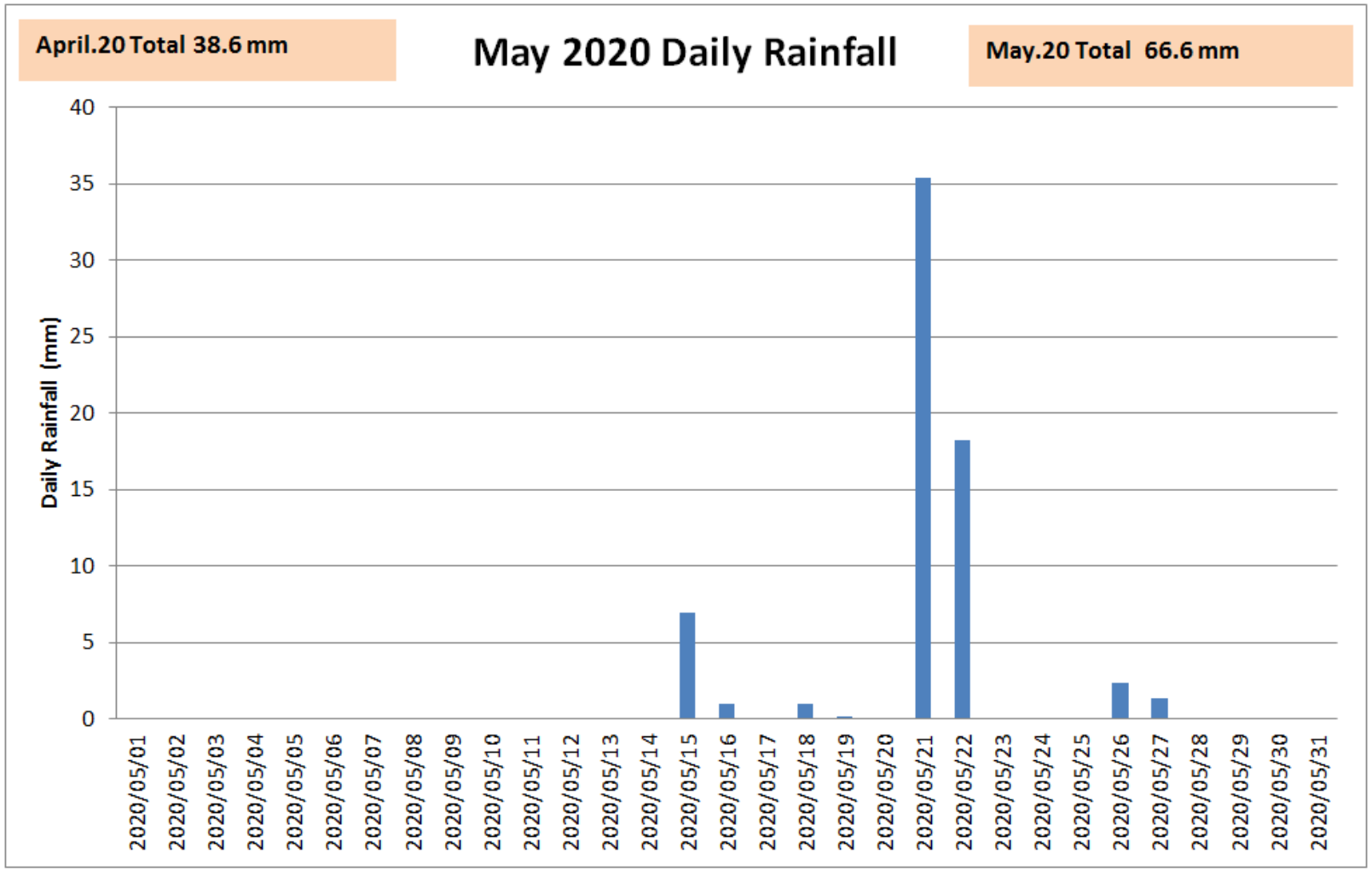
Northern monitor



Frequency of counts by wind direction (%)

Southern monitor



Frequency of counts by wind direction (%)

RAINFALL (PKCT site gauge)