

Licencee:	Port Kembla Coal Terminal Limited
<b>Environment Protection Licence:</b>	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⦥=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



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)							
ТВА	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







E	PL MONITORING	SITES- INDUSTRIAL					Cal	endar	Year 20	)20										
	Monthly Analysis	MONTH	JAN	FEB	MAR	APR	MAY		JUL	AUG	SEP	ОСТ	NOV	DEC	1				Annual average: grams	per square metre, month
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	5.2	4.7	3.6	5.9	2.8	2.6	1.2	12	1.2	4.2	10.5	4.2	15.0
	25m South	Ash	8.7	1.0	2.1	3.2	3.2	3.4	3.1	2.7	4.5	1.8	1.8	0.8	12	0.8	3.0	8.7		
	BPB Coal Berth	Combustible Matter	1.8	0.6	1.1	1.2	0.9	1.8	1.6	0.9	1.4	1.0	0.8	0.4	12	0.4	1.1	1.8	1.1	12.0
2	P2	Insoluble Solids	8.3	2.6	3.0	2.5	5.0	3.1	6.6	2.4	3.9	3.1	3.0	1.4	12	1.4	3.7	8.3	3.7	15.0
	40m South of	Ash	6.6	1.6	2.0	1.9	4.1	2.4	5.3	2.0	3.2	2.0	2.0	0.3	12	0.3	2.8	6.6		
	BPB Stockyard	Combustible Matter	1.7	1.0	1.0	0.6	0.9	0.7	1.3	0.4	0.7	1.1	1.0	1.1	12	0.4	1.0	1.7	1.0	12.0
3	P3	Insoluble Solids	9.7	6.5	5.6	6.5	6.6	6.9	24.1	14.6	14.7	5.8	5.0	5.0	12	5.0	9.3	24.1	9.3	15.0
	40m East of	Ash	7.9	5.1	3.4	4.7	4.6	5.3	18.7	12.5	12.4	4.2	3.1	3.6	12	3.1	7.1	18.7		
	BPB Stockyard	Combustible Matter	1.8	1.4	2.2	1.8	2.0	1.6	5.4	2.1	2.3	1.6	1.9	1.4	12	1.4	2.1	5.4	2.1	12.0
4	P4	Insoluble Solids	9.7	5.2	4.2	3.6	3.8	3.3	4.7	3.9	8.3	2.4	3.0	2.7	12	2.4	4.6	9.7	4.6	15.0
	40m East Coal Berth	Ash	7.9	1.5	2.3	1.3	2.0	2.0	3.0	1.9	2.3	1.3	1.6	1.4	12	1.3	2.4	7.9		
	Stockvard	Combustible Matter	1.8	3.7	1.9	2.3	1.8	1.3	1.7	2.1	6.0	1.1	1.4	1.3	12	1.1	2.2	6.0	2.2	12.0
5	P5	Insoluble Solids	10.9	8.9	12.8	2.7	3.7	2.2	3.4	2.5	4.5	6.6	5.0	5.1	12	2.2	5.7	12.8	5.7	15.0
	Northern Pond	Ash	7.2	3.8	3.4	0.8	1.3	0.9	1.9	1.3	1.6	2.3	2.0	1.5	12	0.8	2.3	7.2		
	(No.1)	Combustible Matter	3.7	5.1	9.4	1.9	2.4	1.3	1.5	1.2	2.9	4.3	3.0	3.6	12	1.2	3.4	9.4	3.4	12.0
- 6	P6	Insoluble Solids	12.0	3.1	7.8	1.4	1.6	0.8	9.5	5.2	5.5	3.9	3.9	4.0	12	0.8	4.9	12.0	4.9	15.0
	40m West Coal Berth	Ash	8.8	1.4	4.1	0.9	1.1	0.5	5.9	3.4	2.6	1.7	1.9	1.8	12	0.5	2.8	8.8		
	Stockyard	Combustible Matter	3.2	1.7	3.7	0.5	0.5	0.3	3.6	1.8	2.9	2.2	2.0	2.2	12	0.3	2.1	3.7	2.1	12.0
7	P7	Insoluble Solids	11.7	2.7	5.0	1.2	1.8	1.7	9.2	3.0	1.3	5.3	2.9	3.0	12	1.2	4.1	11.7	4.1	15.0
	260m West No.2	Ash	8.9	1.6	3.0	0.8	1.3	1.2	7.7	2.2	0.7	3.4	1.6	1.6	12	0.7	2.8	8.9		
	Coalberth	Combustible Matter	2.8	1.1	2.0	0.4	0.5	0.5	1.5	0.8	0.6	1.9	1.3	1.4	12	0.4	1.2	2.8	1.2	12.0
8	P8	Insoluble Solids	14.1	5.4	8.5	15.7	9.1	13.2	11.2	10.4	18.7	8.3	5.4	7.4	12	5.4	10.6	18.7	10.6	15.0
	PKCT North	Ash	8.2	1.8	2.7	2.6	2.4	3.1	3.5	3.0	4.3	2.5	1.8	2.0	12	1.8	3.2	8.2		
	Truckwash	Combustible Matter	5.9	3.6	5.8	13.1	6.7	10.1	7.7	7.4	14.4	5.8	3.6	5.4	12	3.6	7.5	14.4	7.5	12.0
9	P9	Insoluble Solids	9.6	1.6	3.6	0.7	1.4	1.6	2.9	1.6	5.2	2.5	2.0	2.0	12	0.7	2.9	9.6	2.9	6.0
	Wollongong	Ash	7.3	0.8	1.6	0.4	0.7	0.8	1.7	0.8	1.7	1.1	0.7	0.6	12	0.4	1.5	7.3		
	Wastewater TP.	Combustible Matter	2.3	0.8	2.0	0.3	0.7	0.8	1.2	0.8	3.5	1.4	1.3	1.4	12	0.3	1.4	3.5	1.4	4.0
15	P10	Insoluble Solids	17.6	6.0	7.7	2.6	6.3	3.7	6.9	5.1	6.9	6.7	5.4	10.1	12	2.6	7.1	17.6	7.1	15.0
	North of PKCT	Ash	11.7	2.5	3.4	1.2	3.9	2.0	4.4	3.0	3.1	3.0	2.4	5.4	12	1.2	3.8	11.7		
	Planning Office	Combustible Matter	5.9	3.5	4.3	1.4	2.4	1.7	2.5	2.1	3.8	3.7	3.0	4.7	12	1.4	3.3	5.9	3.3	12.0
17	P11	Insoluble Solids	BB	4.4	4.3	2.0	3.4	2.2	7.9	3.3	2.9	3.6	4.8	1.5	11	1.5	3.7	7.9	3.7	6.0
	Entry Gate BlueScope		BB	3.4	3.6	1.5	2.9	1.8	6.5	2.7	2.4	2.7	3.8	1.2	11	1.2	3.0	6.5		
	RO.RO Berth (109)	Combustible Matter	BB	1.0	0.7	0.5	0.5	0.4	1.4	0.6	0.5	0.9	1.0	0.3	11	0.3	0.7	1.4	0.7	4.0
	no.no perm (103)	Compustible Hatter	ᄱ	6.0	0.1	0.5	0.5	0.4	1.4	0.0	0.3	0.3	1.0	0.3		0.5	0.1	1.4	0.1	4.0





•	MONTHLY REPORT: COMMENTARY ON RESULTS													
Note 1: there are no EPL air quali	ity limits in the EPL for industrial mo	nitoring sites. Historical informa	ation provides baseline data	a 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	4/02/2020	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	4/03/2020	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	2/04/2020	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	4/05/2020	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	2/06/2020	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.										
June 2020	2/07/2020	20/07/2020	20/07/2020	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.										
July 2020	4/08/2020	19/08/2020	21/08/2020	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. Results for July are relatively low.										
August 2020	2/09/2020	21/09/2020	24/09/2020	All sites within assessment criteria										
September 2020	2/10/2020	3/11/2020	3/11/2020	All sites within assessment criteria										
October 2020	3/11/2020	23/11/2020	23/11/2020	All sites within assessment criteria										
November 2020	3/12/2020	18/12/2020	21/12/2020	All sites within assessment criteria										
December 2020	4/01/2021	21/01/2021	22/01/2021	All sites within assessment criteria										





EP	L MONITORIN	G SITES- RESIDENTIAL					(	Calenda	r Year 2	2020					Mo	nthly An	alysis		annual avera	age: grams per
		MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1				square n	netre.month
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	0.2	1.5	0.3	0.8	1.0	0.6	0.5	12	0.2	1.5	7.7	1.5	4.0
	157 Church St	Ash	6.6	0.7	0.8	0.2	2.9	0.2	1.1	0.3	0.6	0.6	0.5	0.3	12	0.2	1.2	6.6		
	Wollongong	Combustible Matter	1.1	0.3	0.2	0.2	0.5	<0.1	0.4	<0.1	0.2	0.4	0.1	0.2	12	0.1	0.4	1.1	0.4	2.0
19	R2	Insoluble Solids	8.4	0.6	0.6	0.3	0.3	0.6	1.2	0.4	2.5	1.1	1.3	0.6	12	0.3	1.5	8.4	1.5	4.0
	Vikings Oval	Ash	6.4	0.4	0.3	0.1	0.2	0.4	0.7	0.2	1.0	0.4	0.6	0.3	12	0.1	0.9	6.4		
	Wollongong	Combustible Matter	2.0	2.0	0.3	0.2	0.1	0.2	0.5	0.2	1.5	0.7	0.7	0.3	12	0.1	0.7	2.0	0.7	2.0
TBA	R3	Insoluble Solids	8.6	1.9	0.6	0.3	0.3	0.3	2.7	1.9	0.7	1.3	1.3	1.0	12	0.3	1.7	8.6	1.7	4.0
	Ross Street	Ash	7.2	1.4	0.4	0.1	0.1	0.2	1.9	1.3	0.5	0.9	0.8	0.6	12	0.1	1.3	7.2		
ĺ	Wollongong	Combustible Matter	1.4	0.5	0.2	0.2	0.2	0.1	0.8	0.6	0.2	0.4	0.5	0.4	12	0.1	0.5	1.4	0.5	2.0
	L: Assessment crite	ria is based on an EPA guideline of a		erage of		er square		month for					el of 2 gran	is per squa	are metre for c	ombusti	ble mat	ter for a	ssessment pur	poses.
	January 2020	4/02/2020	2	24/02/202	0		26/02/202	0							ary. The high				the extreme nt criteria.	weather
F	ebruary 2020	4/03/2020	2	20/03/202	0		23/03/202	0	All sites	within asse	essment o	riteria.								
	March 2020	2/04/2020	1	16/04/202	0.		16/04/202	0	All sites	within asse	essment o	riteria.								
	April 2020	4/05/2020		19/05/202	_		19/05/202	_	All sites	within asse	essment o	riteria.								
	May 2020	2/06/2020		22/06/202			23/06/202		All sites	within asse	essment o	riteria.								
	June 2020	2/07/2020	2	20/07/202	0		20/07/202	0	All sites	within asse	essment o	riteria.								
	July 2020	4/08/2020	1	19/08/202	0.		21/08/202	0	All sites	within asse	essment o	riteria. Hiç	h insolubl	e solids re	corded in Jul	y was c	onfirme	d by lab	as "dirt" (70%)	6 of sample).
	August 2020	2/09/2020	2	21/09/202	0		24/09/202	0	All sites	within asse	essment o	riteria.								
	eptember 2020	2/10/2020		3/11/2020	)		3/11/2020	)	All sites	within asse	essment o	riteria.								
	October 2020	3/11/2020	2	23/11/202	0.		23/11/202	0	All sites	within asse	essment o	riteria.								
1	lovember 2020	3/12/2020	1	18/12/202	0		21/12/202	0	All sites	within asse	essment o	riteria.								
	ecember 2020	4/01/2021	2	21/01/202	1		22/01/202	1	All sites	All sites within assessment criteria										





						ORING: Licenced Discharge POINT 16
Environment F	Protection Licer	ice: 1625	water qu	uality parameter	EPL Limit (100 percentile)	
Type of Monito	ring: water qual	ity		pН	monitoring only	
Frequency: da discharging	ily grab sample	when		spended solids (mg/L)	less than 50	
				il/ grease 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
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	notvisible	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	notvisible	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	notvisible	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	notvisible	EPL compliant
10/03/2020	16/04/2020	16/04/2020	7.2	<5	notvisible	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

NB TSS (total suspended solids) - under EPL, a TSS water quality limit of 50 mg/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.





		SETTLEMEN	T LAGOON OV	ERFLOW: ENVIRONME	NT PROTECTION LICENCE MONIT	TORING: Licenced Discharge POINT 16
nvironment P	rotection Licen	ce: 1625	water qu	uality parameter	EPL Limit (100 percentile)	
ype of Monitori	ng: water quality	/		рН	monitoring only	
requency: dail	ly grab sample w	hen discharging	total su	spended solids (mg/L)	less than 50	
				il/ grease grams 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	not visible	EPL compliant
16/05/2020	22/06/2020	23/06/2020	9.8	30	not visible	EPL compliant
21/05/2020	22/06/2020	23/06/2020	10.6	28	not visible	EPL compliant
22/05/2020	22/06/2020	23/06/2020	9.3	12	not visible	EPL compliant
23/05/2020	22/06/2020	23/06/2020	7.2	5	not visible	EPL compliant
25/05/2020	22/06/2020	23/06/2020	7.6	6	not visible	EPL compliant
26/05/2020	22/06/2020	23/06/2020	7.8	<5	not visible	EPL compliant
09/06/2020	20/07/2020	20/07/2020	8.0	<5	not visible	EPL compliant
10/06/2020	20/07/2020	20/07/2020	8.0	<5	not visible	EPL compliant
12/06/2020	20/07/2020	20/07/2020	7.8	<5	not visible	EPL compliant
13/06/2020	20/07/2020	20/07/2020	7.6	<5	not visible	EPL compliant
14/06/2020	20/07/2020	20/07/2020	7.7	<5	not visible	EPL compliant
15/06/2020	20/07/2020	20/07/2020	7.7	<5	not visible	EPL compliant
16/06/2020	20/07/2020	20/07/2020	7.7	8	not visible	EPL compliant
17/06/2020	20/07/2020	20/07/2020	7.7	6	not visible	EPL compliant
18/06/2020	20/07/2020	20/07/2020	7.7	<5	not visible	EPL compliant
22/06/2020	20/07/2020	20/07/2020	7.5	7	not visible	EPL compliant
24/06/2020	20/07/2020	20/07/2020	8.9	<5	not visible	EPL compliant
25/06/2020	20/07/2020	20/07/2020	7.1	9	not visible	EPL compliant
26/06/2020	20/07/2020	20/07/2020	9.2	6	not visible	EPL compliant
06/07/2020	19/08/2020	21/08/2020	7.4	9	not visible	EPL compliant
13/07/2020	19/08/2020	21/08/2020	8.9	10	not visible	EPL compliant
14/07/2020	19/08/2020	21/08/2020	8.5	10	not visible	EPL compliant
15/07/2020	19/08/2020	21/08/2020	8.0	<5	not visible	EPL compliant
24/07/2020	19/08/2020	21/08/2020	9.0	<5	not visible	EPL compliant
26/07/2020	19/08/2020	21/08/2020	8.8	7	not visible	EPL compliant
27/07/2020	19/08/2020	21/08/2020	7.8	12	not visible	EPL compliant
28/07/2020	19/08/2020	21/08/2020	7.3	20	not visible	EPL compliant
29/07/2020	19/08/2020	21/08/2020	7.0	7	not visible	EPL compliant
31/07/2020	19/08/2020	21/08/2020	7.2	<5	not visible	EPL compliant

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.





		SETTLEMEN	IT LAGOON OV	ERFLOW: ENVIRONME	NT PROTECTION LICENCE MONIT	ORING: Licenced Discharge POINT 16
<b>Environment P</b>	rotection Licen	ice: 1625	water qu	ality parameter	EPL Limit (100 percentile)	
Type of Monitor	ring: water qual	ity		pН	monitoring only	1
Frequency: dai	ily grab sample	when	total sus	pended solids		1
discharging	, 5			(mg/L)	less than 50	
			oi	I/ grease		1
				rams per litre)	not visible	
Sample Date	Date Results Obtained	Date Published	(pH units) (milligrams per litre)		oil/ grease (milligrams per litre)	Commentary on Results
03/08/2020	21/09/2020	24/09/2020	7.3	<5	not visible	EPL compliant
06/08/2020	21/09/2020	24/09/2020	7.4	<5	not visible	EPL compliant
07/08/2020	21/09/2020	24/09/2020	7.4	<5	not visible	EPL compliant
08/08/2020	21/09/2020	24/09/2020	7.2	6	not visible	EPL compliant
09/08/2020	21/09/2020	24/09/2020	7.3	25	not visible	EPL compliant
10/08/2020	21/09/2020	24/09/2020	6.5	7	not visible	EPL compliant
11/08/2020	21/09/2020	24/09/2020	7.4	12	not visible	EPL compliant
12/08/2020	21/09/2020	24/09/2020	7.5	12	not visible	EPL compliant
13/08/2020	21/09/2020	24/09/2020	7.4	18	not visible	EPL compliant
17/08/2020	21/09/2020	24/09/2020	7.4	<5	not visible	EPL compliant
18//08/2020	21/09/2020	24/09/2020	7.6	<5	not visible	EPL compliant
19/08/2020	21/09/2020	24/09/2020	7.7	<5	not visible	EPL compliant
20/08/2020	21/09/2020	24/09/2020	7.7	<5	not visible	EPL compliant
24/08/2020	21/09/2020	24/09/2020	7.4	8	not visible	EPL compliant
27/08/2020	21/09/2020	24/09/2020	7.8	<5	not visible	EPL compliant
20/09/2020	03/11/2020	03/11/2020	9.1	<5	not visible	EPL compliant
24/10/2020	23/11/2020	23/11/2020	8.0	18	not visible	EPL compliant
25/10/2020	23/11/2020	23/11/2020	8.3	8	not visible	EPL compliant
26/10/2020	23/11/2020	23/11/2020	7.8	10	not visible	EPL compliant
27/10/2020	23/11/2020	23/11/2020	7.7	<5	not visible	EPL compliant
28/10/2020	23/11/2020	23/11/2020	7.6	<5	not visible	EPL compliant
29/10/2020	23/11/2020	23/11/2020	7.5	<5	not visible	EPL compliant
31/10/2020	23/11/2020	23/11/2020	6.9	<5	notvisible	EPL compliant
01/11/2020	18/12/2020	21/12/2020	7.3	5	notvisible	EPL compliant
05/11/2020	18/12/2020	21/12/2020	7.2	<5	notvisible	EPL compliant
12/11/2020	18/12/2020	21/12/2020	7.6	<5	notvisible	EPL compliant
13/11/2020	18/12/2020	21/12/2020	7.6	6	notvisible	EPL compliant
25/11/2020	18/12/2020	21/12/2020	7.8	8	notvisible	EPL compliant
* "Date Publis!	hed" refers to th	is 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.





	SETTLE	MENT LAGOO	N OYERFLO	Y: ENYIRONMEN	T PROTECTION LICENCE M	MONITORING: Licenced Discharge POINT 16
Environmen	t Protection	Licence: 1625	₩ater qu	ality parameter	EPL Limit (100 percentile)	
ype of Monito	oring: water qua	dity		рН	monitoring only	
requency: da	ily grab sample v	when discharging		spended solids (mg/L)	less than 50	
				ilf grease 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
3/12/2020	21/01/2021	22/01/2021	7.5	7	not visible	EPL compliant
7/12/2020	21/01/2021	22/01/2021	7.0	<5	not visible	EPL compliant
11/12/2020	21/01/2021	22/01/2021	7.9	5	not visible	EPL compliant
14/12/2020	21/01/2021	22/01/2021	7.9	12	not visible	EPL compliant
15/12/2020	21/01/2021	22/01/2021	7.9	6	not visible	EPL compliant
16/12/2020	21/01/2021	22/01/2021	6.5	<5	not visible	EPL compliant
17/12/2020	21/01/2021	22/01/2021	8.0	<5	not visible	EPL compliant
18/12/2020	21/01/2021	22/01/2021	7.9	<5	not visible	EPL compliant
21/12/2020	21/01/2021	22/01/2021	7.1	5	not visible	EPL compliant
22/12/2020	21/01/2021	22/01/2021	7.2	<5	not visible	EPL compliant
27/12/2020	21/01/2021	22/01/2021	7.3	<5	not visible	EPL compliant
28/12/2020	21/01/2021	22/01/2021	7.4	<5	not visible	EPL compliant
29/12/2020	21/01/2021	22/01/2021	7.5	6	not visible	EPL compliant
30/12/2020	21/01/2021	22/01/2021	7.5	<5	not visible	EPL compliant
31/12/2020	21/01/2021	22/01/2021	7.4	6	not visible	EPL compliant
				1		

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 d epth value of 90 mm over a consecutive 5 day period.





			2020	) PKCT Sedimen	tation Pond Ov	erflows - EPL 1	625
	Р	onds location/r	names: TS1 pond	d: DP22, Central Pond: DP2	3, Tower 3 pond: DP24, So	outh Pond: DP25, Worksho	p 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 f	rom 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	
					from any satellite ponds in	_ ·	
					from any satellite ponds i		
		I		No overflows	from any satellite ponds i	n June 2020	

Environment Protection Licence 1625 Monthly Report: December 2020





			2020	PKCT Sedimen	tation Pond Ov	verflows - EPL 1	625
	Р	onds location/r	names: TS1 pon	d: DP22, Central Pond: DP2	23, Tower 3 pond: DP24, So	outh Pond: DP25, Worksho	p 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
DP23 - Central Pond	27/07/2020	03/08/2020	21/08/2020	6.7	192	not visible	Overflow of Central Pond occurred during large rain event in July. 115.4mm of rainfall fell across a four day period from 25th to 28th July. 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	27/07/2020	03/08/2020	21/08/2020	7.5	23	not visible	Overflow of South Pond occurred during large rain event in July.  115.4mm of rainfall fell across a four day period from 25th to 28th July. 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.
DP24 - Tower 3 pond	27/07/2020	04/08/2020	21/08/2020	7.03	196	not visible	Overflow of Tower 3 Pond occurred during large rain event in July.  115.4mm of rainfall fell across a four day period from 25th to 28th July. 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	28/07/2020	04/08/2020	21/08/2020	7.34	200	not visible	Overflow of Central Pond occurred during large rain event in July.  115.4mm of rainfall fell across a four day period from 25th to 28th July. 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.
DP24 - Tower 3 pond	28/07/2020	04/08/2020	21/08/2020	7.43	50	not visible	Overflow of Tower 3 Pond occurred during large rain event in July.  115.4mm of rainfall fell across a four day period from 25th to 28th July. 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	28/07/2020	04/08/2020	21/08/2020	7.31	20	not visible	Overflow of South Pond occurred during large rain event in July.  115.4mm of rainfall fell across a four day period from 25th to 28th July. 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.

Environment Protection Licence 1625 Monthly Report: December 2020





Detained Published Criteria: Monitoring only Deversion of TS1 Pond occurred during large rain event in August. 164, 8mm of rainfall fell across a four day period from 7th to 10th August. 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.  P24 - Tower 3 Pond 08/08/2020 17/08/2020 24/09/2020 6.63 88 45 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 17/08/2020 17/08/2020 24/09/2020 6.63 88 45 469-8020 17/08/2020 17/		2020 PKCT Sedimentation Pond Overflows - EPL 1625												
Sample Location Sample Date Date Results Obtained Date Results Date Results Obtained Date Results D		Pond	Ponds location	n/names: TS1 pond:	DP22, Central Pond: DP2	3, Tower 3 pond: DP24, S	outh Pond: DP25, Works	hop Pond DP26, Berth 102 DP27.						
DP22 - TS1Pond  08/08/2020  17/08/2020  24/09/2020  7.24  457  8  164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.  P24 - Tower 3 Pond  08/08/2020  17/08/2020  24/09/2020  24/09/2020  6.63  88  457  164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.  Overflow of Central Pond occurred. Pond and pump capacity could not keep up with the inflows. Discharge is permitted under PKCT's licence conditions.  Overflow of Tower 3 Pond occurred during large rain event in August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.	Sample Location	Sample Date	de Hate E		(pH units)	Solids (milligrams per litre)	(milligrams per litre)	Commentary on Results						
P23 - Central Pond  08/08/2020  17/08/2020  24/09/2020  6.28  386  8  August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.  Overflow of Tower 3 Pond occurred during large rain event in August. 164.8mm of rainfall fell across a four day period from 7th to August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 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	DP22 - TS1Pond	08/08/2020	8/2020 17/08/2	2020 24/09/2020	7.24	457	8	164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.						
P24 - Tower 3 Pond 08/08/2020 17/08/2020 24/09/2020 6.63 88 5 August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 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	DP23 - Central Pond	08/08/2020	8/2020 17/08/2	2020 24/09/2020	6.28	386	8	August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.						
	DP24 - Tower 3 Pond	08/08/2020	8/2020 17/08/2	2020 24/09/2020	6.63	88	<b>&lt;</b> 5	August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. 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.						
164.8mm of rainfall fell across a four day period from 7th to 10th  August Pond sediment levels were below the required 20% and pr	DP25 - Southern Pond	08/08/2020	8/2020 17/08/2	2020 24/09/2020	6.82	115	13	August. 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						
of Central Pond occurred during large rain event in August.  P23 - Central Pond 10/08/2020 17/08/2020 24/09/2020 8.68 94 /5 164.8mm of rainfall fell across a four day period from 7th to 10th	DP23 - Central Pond	10/08/2020	3/2020 17/08/2	2020 24/09/2020	6.68	94	<5	rain. Samples taken the next morning when safe to do so. Overflow of Central Pond occurred during large rain event in August.  164.8mm of rainfall fell across a four day period from 7th to 10th August. 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						
P24 - Tower 3 Pond 10/08/2020 17/08/2020 24/09/2020 7.07 102 16 of Tower 3 Pond occurred during large rain event in August. 164.8mm of rainfall fell across a four day period from 7th to 10th August. Pond sediment levels were below the required 20% and not keep up with the inflows. Discharge is permitted under PKCT's licence conditions.	DP24 – Tower 3 Pond	10/08/2020	3/2020 17/08/2	2020 24/09/2020				rain. Samples taken the next morning when safe to do so. Overflow of Tower 3 Pond occurred during large rain event in August.  164.8mm of rainfall fell across a four day period from 7th to 10th August. 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						
No overflows from any satellite ponds in September 2020														
No overflows from any satellite ponds in October 2020  No overflows from any satellite ponds in November 2020						<u>-</u>								
No overflows from any satellite ponds in November 2020  No overflows from any satellite ponds in December 2020														





Publish Date: 22<sup>nd</sup> January, 2020

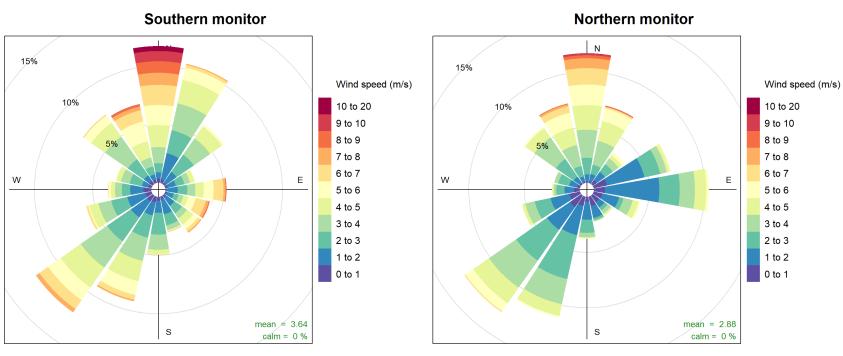
#### **PKCT Water Collection System Discharge Points**







#### **WIND ROSES – December 2020**



Frequency of counts by wind direction (%)

Frequency of counts by wind direction (%)





Publish Date: 22<sup>nd</sup> January, 2020

**RAINFALL (PKCT site gauge)** 

