

Interim Environmental Management Report

2012/2013

Reporting Period 1.7.12-31.12.12



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Contents

1.	Introduction	3
1.1	Purpose	3
1.2	Scope	3
1.3	Methodology	3
2.	Monitoring	4
2.1	Noise	4
2.2	Transport	5
2.3	Air Quality	6
2.4	Meteorological Monitoring	7
2.5	Surface Water	8
2.6	Biodiversity	9
2.7	Greenhouse & Energy Efficiency	10
2.8	Waste	11
2.9	Hazards	12
3.	Community Relations	12
4.	Independent External Audit 2011- Status of Actions	13
5.	Conclusion	13
6.	References	13
	Attachment “A” Noise Monitoring Report- October 2012	14
	Attachment “B” Summary of PKCT Throughput and Receivals	16
	Attachment “C” Road Transport Complaints & Incidents Summary	17
	Attachment “D” Road Transport Report- July-December 2012	19
	Attachment “E” Air Quality- Monitoring Sites	20
	Attachment “F” Air Quality: Dust Deposition	21
	Attachment “G” Air Quality: Continuous Dust Data	22
	Attachment “H” Weather Monitoring Summary- July- December 2012	25
	Attachment “I” Water Usage Report	27
	Attachment “K” Settlement Lagoon Discharges: July-December 2012	28
	Attachment “L” Greenhouse Gas Report- July- December 2012	29
	Attachment “M” Electricity Usage Report to January 2013	30
	Attachment “N” Waste Report July-December 2012	31

1. Introduction

1.1 Purpose

The purpose of the Interim Environment Management Report (IEMR) is to provide the community, Department of Planning and Infrastructure (DPI) and other stakeholders a summary of Port Kembla Coal Terminal (PKCT)'s monitoring results in accordance with Schedule 4 Condition 9(a) of DPI Approval 08_0009.

1.2 Scope

PKCT Major Project Approval 08_0009 was granted on the 12th June 2009. The approval included a requirement of PKCT to prepare an Annual Environment Management Report(AEMR). Approval also requires an interim report covering the initial 6 months of the reporting period. Accordingly, the first PKCT AEMR was submitted to the DPI applies to the period of 1st July 2009 – 30th June 2010 (the reporting period).

PKCT also has an Environment Protection Authority (EPA) Environment Protection Licence 1625. EPA requires licencees to make monitoring results available to the public.

Accordingly, this IEMR will be published on PKCT website (www.pkct.com.au).

1.3 Methodology

Section 2 provides a description of the various environmental aspects monitored by PKCT under its EPL and DPI approval conditions. Each aspect references applicable assessment criteria and provides a commentary on the monitoring undertaken. Monitoring results are included in the attachments herein.

2. Monitoring

2.1 Noise

2.1.1 Assessment Criteria

EPL 1625 & Major Project Approval 08_0009 control noise emissions from PKCT's premises. Noise criteria is outlined as follows:-

- The Proponent shall ensure that the noise generated by the project at any privately-owned residence does not exceed the criteria specified in Table 1 for the location nearest to that residence.

Table 1: Noise impact assessment criteria $L_{Aeq}(15 \text{ min})$ dB(A)

Location	Time Period	Limits ($L_{Aeq,15 \text{ min}}$ dB(A))
Cnr Swan St/Kembla St	Day	51
	Evening	50
	Night	49
Cnr Swan St/Corrimal St	Day	51
	Evening	50
	Night	49
Cnr Keira St/Fox St	Day	55
	Evening	49
	Night	45

Notes:

- To determine compliance with the $L_{Aeq}(15 \text{ minute})$ noise level limits in the above table, noise from the project is to be measured at the most affected point within the residential boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the DECC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- The noise emission limits identified in the above table apply under meteorological conditions of:
 - wind speeds of up to 3 m/s at 10 metres above ground level; or
 - temperature inversion conditions of up to 3°C/100m, plus a 2 m/s source-to-receiver component drainage flow wind at 10 metres above ground level for those receivers where applicable in accordance with the NSW Industrial Noise Policy.

However, if the Proponent has a written negotiated noise agreement with any landowner of the land listed in Table 1, and a copy of this agreement has been forwarded to the Department and DECC, then the Proponent may exceed the noise limits in Table 1 in accordance with the negotiated noise agreement.

2.1.2 Monitoring and Results

A routine noise survey was undertaken in October 2012. Summary of monitoring data is provided in the Attachment "A". Noise surveys determined that PKCT noise levels were within the noise criteria in EPL 1625 and DPI Approval 08_0009.

2.2 Transport

2.2.1 Assessment Criteria

Monitoring of Coal Transport

4. The Proponent shall keep records of the amount of coal and bulk products received at the site each year, and include these records in the AEMR.

Traffic Management

5. The Proponent shall ensure that vehicles waiting to deliver coal or bulk products to the site do not queue or park on public roads other than Port Kembla Road.

Driver's Code of Conduct

6. The Proponent shall, in consultation with affected mines and principal haulage operators, develop a program to implement the Driver's Code of Conduct (see Appendix 3) to the satisfaction of the Director-General. This program must:
 - (a) be submitted to the Director-General for approval within 6 months from the date of this approval, or as otherwise agreed by the Director-General;
 - (b) include a driver induction program to cover (but not be limited to) speed limits, compression braking, truck washing, load covering and queuing on local roads; and
 - (c) include measures to ensure the Driver's Code of Conduct is enforced.

2.2.2 Monitoring and Results

Attachment "B" provides a summary of receipts and shiploading throughput data for the reporting period.

PKCT received 1,999,353 tonnes (annualised 3,998,706 tonnes) by public road during the first half of reporting period which is less than 7.5 million. This accords with approval thresholds in Major Project Approval 08_0009 and the EA. EPL 1625 has no criteria for product receipt.

Attachments "C" and "D" provide a summary of monitoring results pertaining to road transport and the Drivers Code of Conduct. A Road Users Group (PKCT, truck companies and relevant coal and bulk products shippers) meet to review implementation and monitoring results. During this reporting period, a meeting was held on 5th July and 27th September 2012. Weekly Shippers meetings are also held to coordinate shipping and receipt plans. This is facilitated by PKCT with shippers in attendance and is a forum where any issues can be raised. Outside of meetings, PKCT has communications with road transport providers where road and Drivers Code of Conduct matters can be raised and actioned.

2.3 Air Quality

2.3.1 Assessment Criteria

Impact Assessment Criteria

7. The Proponent shall ensure that dust generated by the project does not cause additional exceedances of the criteria listed in Tables 3 to 5 at any residence.

Table 3: Long term impact assessment criteria for particulate matter

Pollutant	Averaging Period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM10)	Annual	30 µg/m ³

Table 4: Short term impact assessment criteria for particulate matter

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM10)	24 hour	50 µg/m ³

Table 5: Long term impact assessment criteria for deposited dust

Pollutant	Averaging Period	Maximum Increase in Deposited Dust Level	Maximum Total Deposited Dust Level
Deposited Dust	Annual	2 g/m ² /month	4 g/m ² /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

However, if the Proponent has a written negotiated air quality agreement with any landowner to exceed the air quality limits in Table 3, 4 and/or 5, and a copy of this agreement has been forwarded to the Department and DECC, then the Proponent may exceed the air limits in Table 3, 4 and/or 5 in accordance with the negotiated air quality agreement.

EPL 1625 contains a requirement for dust monitoring but no specified limits for dust, or other air quality emissions. The EPL does require the following:

O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

O3.2 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation or emission of wind blown, or traffic generated dust.

2.3.2 Monitoring and Results

PKCT monitors air quality using dust deposition gauges and continuous dust monitors located on site, adjacent port and residential areas as shown on Attachment “E”

Dust deposition data is reported on PKCT’s web site www.pkct.com.au in a monthly Environment Protection Licence Monitoring Report. Dust deposition levels across the reporting period were within the assessment criteria.

Attachment “F” provides trend graphs for PKCT’s residential sites. Dust deposition levels were within annual average of 4 grams. square metre per month for insoluble and chart indicates an improvement trend.

Attachment “G” provides a summary of continuous dust data. Table 9 compares annual PM10 and TSP with assessment criteria. TSP was within criteria, PM10 was outside. Table 10 and 11 provides a report of 24 hour TSP and PM10 exceedances compared against the assessment criteria. Exceedances were recorded for TSP and PM10 on 31 and 54 days respectively. It is noted that the northern monitor is not located on the northern residential boundary so that exceedance results are considered conservative. Re. Table 9, the number of exceedance days where PKCT was assessed as having a minor or higher contribution for TSP and PM10 was 0.06% and 0.09% respectively across the reporting period.

Analysis of wind direction, up wind and district effects indicated that PKCT is predominately a minor contributor. Interestingly, dust deposition levels have been quite good across the reporting period within assessment criteria.

2.4 Meteorological Monitoring

2.4.1 Assessment Criteria

11. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station on or in the vicinity of the site that generally complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

2.4.2 Monitoring and Results

PKCT was compliant with this Condition during the reporting period. Meteorological monitoring is undertaken as follows:-

- Northern and southern continuous dust monitors are calibrated annually and measure PM10, PM2.5, TSP, wind speed and wind direction.
- PKCT also has an anemometer on the Central Control Tower. It measures wind speed and direction as well as rainfall, pressure, temperature and humidity.
- Summary data is provided in Attachment “H”

2.5 Surface Water

2.5.1 Assessment Criteria

The Protection of the Environment Operations (POEO) Act 1997 sets requirements and controls regarding pollution of the environment. Section 120 of this Act confirms it is an offence to cause or permit pollution of any waters. PKCT is required to comply with this requirement, however, PKCT’s EPL 1625 provides site specific water pollution permissions and requirements relating to their activities.

EPL 1625 Water Quality Limits

Pollutant	Unit of Measure	100 Percentile Concentration Limit
Oil and Grease	Milligrams per litre	10
pH	pH	6.5-8.5
Total Suspended Solids (TSS)	Milligrams per litre	50

However, in the event that rainfall at the PKCT premises exceeds a total of 90mm over a consecutive 5 day period, the EPL permits exceedance of the TSS limit in Table 5.1, but only if the TSS discharge does not exceed a 5 day average of 100mg/l.

Condition 12 of Schedule 3 of Major Project Approval 08_0009 also specifies a surface water standard for PKCT activities. The following extract identifies the control.

DPI Approval 08_0009 Water Quality Condition

SURFACE WATER

Discharge Limits

12. Except as may be expressly provided in an EPL for the project, the Proponent shall comply with Section 120 of the *Protection of the Environment Operations Act 1997*.

This replicates PKCT’s surface water requirement under the POEO Act and is therefore controlled by EPL 1625.

Energy Administration (Water and Energy Savings) Act 2005 sets out obligations for water use and conservation and requires PKCT to have a Water Savings Action Plan. PKCT has a Water Savings Action Plan in place and is continuing efforts to minimize overall and potable water usage.

2.5.2 Monitoring and Results

PKCT has a Water Management Plan which covers the use of water, collection of process and stormwater, treatment and control of water for reuse and discharge to harbour waters.

Attachment “I” provides data on potable and recycled water usage. Potable water usage has increased across the reporting period primarily due to recycled water supply problems encountered by Sydney Water. Problems have been rectified and it is expected that this will

be reflected in reduced potable water usage. Low rainfall and wind conditions has also resulted in an increase in total water usage associated with dust control.

Attachment “K” provides water quality results from PKCT’s EPL licenced discharge point of harbor discharges. The results indicate the following:-

(a) 100% compliance for pH and oil and grease. One sample recorded a marginal total suspended solids exceedance. In general, water quality has been excellent, well within EPL water quality criteria.

(b) Since commencement of recycled water use at PKCT, pH has been found, at times, to be outside EPL limits potentially due to increased nutrient levels in collected water. Algae is appearing in the lagoon from time to time and this is adding to the total suspended solids level in harbour discharges. Monitoring is continuing in consultation with EPA to ascertain the cause and determine appropriate actions. Consultant advice indicates that periodic discharge, usually during storm conditions, of water with elevated pH doesn’t adversely impact on receiving waters.

An Environment Protection Licence Pollution Reduction Plan is currently in place under which PKCT is investigating ways of improving system performance so that total suspended solids and pH is within EPL limits.

2.6 Biodiversity

2.6.1 Assessment Criteria

Green and Golden Bell Frog Management Plan

14. The Proponent shall prepare and implement a Green and Golden Bell Frog Management Plan for the project to the satisfaction of the Director-General. This program must:
- (a) be developed in consultation with DECC; and
 - (b) be submitted to the Director-General for approval within 12 months from the date of this approval, or as otherwise agreed by the Director-General.

Objective	PKCT Commitment
<ul style="list-style-type: none"> • Management of Green and Golden Bell Frogs (GGBF). 	<ul style="list-style-type: none"> • Implement Interim Management Plan. • Undertake a GGBF Survey and then develop a Long Term Plan of Management.

2.6.2 Monitoring and Results

PKCT has a Green and Golden Bell Frog (GGBF) management plan in place. Internal and external (with consultant) surveys are undertaken periodically by PKCT. PKCT's consultant, Biosphere, undertook a review of PKCT's management plan in July 2011. Site inspections associated with the review failed to detect any GGBF on site, any signs of tadpole activity or croaking. The management plan has been reviewed and submitted to the Environment Protection Authority. Opportunities to further develop Greenhouse Park frog habitat are under consideration.

There have been no onsite sightings of Green and Golden Bell Frogs in this reporting period.

2.7 Greenhouse & Energy Efficiency

2.7.1 Assessment Criteria

Operating Conditions

17. The Proponent shall implement all reasonable and feasible measures to minimise:
- (a) energy use onsite; and
 - (b) greenhouse gas emissions from the project to the satisfaction of the Director-General.

Greenhouse and Energy Efficiency Plan

18. Within 12 months of this approval or as otherwise agreed by the Director-General, the Proponent shall prepare and implement a Greenhouse and Energy Efficiency Plan for the project. This plan must:
- (a) be prepared generally in accordance with the *Guidelines for Energy Savings Action Plans* (DEUS 2005, or its latest version);
 - (b) be submitted to the Director-General for approval;
 - (c) include a program to estimate/monitor greenhouse gas emissions and energy use generated by the project;
 - (d) include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use at the project;
 - (e) describe how the performance of these measures would be monitored over time; and
 - (f) report on the project's greenhouse gas emissions and minimisation measures in the AEMR to the satisfaction of the Director-General.

EPL 1625 does not include any requirements relating to GHG emissions or energy use.

Major Project Approval 08_0009 has requirements relating to GHG and energy efficiency but does not set any prescriptive controls. Condition 18 of Schedule 3 requires the following.

Objective	PKCT Commitment
<ul style="list-style-type: none"> • Minimise the production of greenhouse gas emissions associated with PKCT operations. 	<ul style="list-style-type: none"> • PKCT to review onsite electricity use and identify and implement economically viable opportunities for reduced electricity usage.

2.7.2 Monitoring and Results

GHG & Energy Efficiency

Neither EPL 1625 nor DPI Approval 08_0009 specifies criteria for GHG emissions or energy reduction. It is noted that Greenhouse Gases - Scope 1 and Scope 2 emissions are below the National Greenhouse and Energy Reporting (NGER) scheme reporting threshold.

Attachment “L” and “M” provides data covering the reporting period. Data shows efficiency, in terms of energy use per tonne, has reduced and is at baseline. Efficiency has been affected by lower throughput months and fluctuations. Opportunities are being sought to improve efficiency through proposed plant/ equipment replacements and upgrades.

Use of soya biodiesel has continued across the reporting period primarily for front end loader operations.

2.8 Waste

2.8.1 Assessment Criteria

EPL 1625 does not include any standards or performance measures relating to waste.

Major Project Approval 08_0009 has requirements relating to waste but does not set any prescriptive controls. Condition 19 of Schedule 3 requires the following.

Operating Conditions

19. The Proponent shall:
- (a) monitor the amount of waste generated by the project;
 - (b) investigate ways to minimise waste generated by the project;
 - (c) implement reasonable and feasible measures to minimise waste generated by the project; and
 - (d) report on waste management and minimisation in the AEMR to the satisfaction of the Director-General.

2.8.2 Monitoring and Results

PKCT has a Waste Management Plan in place. The plan contains waste monitoring, assessment, reporting, mitigation and management provisions to ensure necessary actions and that waste from PKCT premises comply with the criteria in the condition above.

Waste data was not available during the compilation of this report as service arrangements are in the process of change. A detailed report will be provided in the 2013 Annual Environment Management Report providing a breakdown of waste into waste streams.

2.9 Hazards

2.9.1 Assessment Criteria

Dangerous Goods

20. The Proponent shall ensure that storage, handling and transport of dangerous goods are done in accordance with the relevant *Australian Standards*, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*.

2.9.2 Monitoring and Results

PKCT has two underground hydrocarbon tanks storing diesel and unleaded petrol. Routine ground water sampling and testing across 2012 has continued and no evidence of leaks has been found. Alternative arrangements are being made and put in place after which use of the tanks will be discontinued. The tanks will then be decommissioned in accordance with regulatory requirements. Further information will be provided in AEMR due in July 13.

3. Community Relations

3.1.1 Assessment Criteria

	PKCT Commitment
<ul style="list-style-type: none"> PKCT to be regarded as a responsible corporate citizen by the community. 	<ul style="list-style-type: none"> Continued operation of the PKCT Community Consultative Committee. Continued advertisement and operation of the telephone hotline.

3.1.2 Monitoring and Results

Complaints received during the reporting period entail the following:

- One complaint was received (in November 2012) during the reporting period. Complaint was related to dust and was of a general nature. Complaint was made via the EPA. PKCT provided a response and the matter has been closed.
- Complaints to road transport providers are outlined in Attachment "C" and "D".

The following actions occurred during the reporting period:

- Community Consultative Committee has met on 25th July and 28th November 2012.
- PKCT web site (www.pkct.com.au) continues to include e-mail and phone contact details (communitylinks@pkct.com.au).

4. Independent External Audit 2011- Status of Actions

Audit was carried out by consultant, AECOM P/L, in March 2011 and an audit report was submitted to the DPI on 10th May 2011.

PKCT submitted a report to the DPI on 10th August 2011 providing feedback on the audit findings and an action plan. Overall, audit findings were accepted. Some clarification was sought from the DPI on the interpretation of some aspects of the approval conditions. Clarification was provided by the DPI on 27th November 2011.

Actions

- Water collection system's settlement lagoon dosing unit upgrade to address current EPL compliance issues is complete. pH monitoring is monitoring and algae controls are being trialled.
- Underground fuel tanks- consultant review of the fuel system was completed by consultant, GHD, in December 2011. Integrity tests and routine ground water tests indicate the tanks are sound and no leaks have been detected. As referenced in Section 2.9.2, alternative arrangements are being made and the use of the underground tanks will be discontinued.
- North truckwash upgrade is in progress and due for completion by August 2013.
- North transfer station area has been paved providing a positive dust control improvement.
- Drivers Code of Conduct improvement actions are continuing and improvement opportunities are being investigated with road transport companies.

5. Conclusion

Monitoring undertaken during the reporting period did not identify any notable adverse aspects. Further work to be finalised will be reported in the Annual Environmental Management Report due on 31st July 2013.

6. References

Environmental Protection Licence 1625 – Port Kembla Coal Terminal
Major Project Approval 08_0009 for the Port Kembla Coal Terminal Project



Attachment “A” Noise Monitoring Report- October 2012

Port Kembla Coal Terminal
September 2012 Compliance Monitoring

Page 14
Report No. 07355-NM-6 Version A

Table 5-3 Summary of Monitoring Results – Location 3 – Corner Keira & Fox Streets

Start Date & Time	Period	Criteria (dBA)	BarnOwl® PKCT Direction (contribution) L _{Aeq} (dBA)	BarnOwl® All Noise L _{Aeq} (dBA)	SLM L _{A90} (dBA)	Wind Speed (m/s) and Direction	Stability Class	Compliance	Observations
20 Sept 2012 17:15 – 17:30	Day	51	<49	64	56	2.4 – 2.8 m/s; NE - NNE	C to D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 17 truck movements witnessed.
20 Sept 2012 21:35 – 21:50	Evening	50	<44	59	44	0.7 – 1.1 m/s; NW - N	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 8 truck movements witnessed.
20 Sept 2012 21:50 – 22:05	Evening	50	<44	59	44	0.7 – 1.1 m/s; NW - NNW	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 7 truck movements Witnessed.
21 Sept 2012 00:25 – 00:40	Night	49	<35	50	38	1.7 – 3.8 m/s; NbE - W	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 9 truck movements witnessed, a train stopping/starting engine periodically and a ship loading at berth 2 during the last 5 minutes of measurement.
21 Sept 2012 00:40 – 00:55	Night	49	<40	55	40	1.7 – 3.8 m/s; NbE - NNE	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 7 truck movements witnessed, a train stopping/starting engine periodically and a ship loading at berth 2.

WILKINSON MURRAY

Port Kembla Coal Terminal
September 2012 Compliance Monitoring

Page 13
Report No. 07355-NM-6 Version A

Table 5-2 Summary of Monitoring Results – Location 2 – Corner Swan & Corrimal Streets

Start Date & Time	Period	Criteria (dBA)	BarnOwl® PKCT Direction (contribution) L _{Aeq} (dBA)	BarnOwl® All Noise L _{Aeq} (dBA)	SLM L _{A90} (dBA)	Wind Speed (m/s) and Direction	Stability Class	Compliance	Observations
20 Sept 2012 16.10 – 16.25	Day	51	<45	60	51	2.6 - 3.2 m/s; NNE - ENE	C to D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 14 truck movements witnessed and a train idling in the dumping area.
20 Sept 2012 20.15 – 20.30	Evening	50	<38	53	44	1.0 – 1.5 m/s; NWbN - N	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 5 truck movements witnessed and a train movement.
20 Sept 2012 20.30 – 20.45	Evening	50	<40	55	44	1.0 – 1.5 m/s; NNW - N	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 5 truck movements witnessed and a train departure.
20 Sept 2012 22.20 – 22.35	Night	49	<41	56	45	1.0 – 2.5 m/s; NBe - N	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 9 truck movements witnessed and a train idling.
20 Sept 2012 22.35 – 22.50	Night	49	<41	56	44	1.3 – 2.5 m/s; NBe - N	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible On-site typically 8 truck movements witnessed and a train idling.

WILKINSON MURRAY

Attachment “A” Noise Monitoring Report- October 2012 (continued)

Port Kembla Coal Terminal
 September 2012 Compliance Monitoring

Page 14
 Report No. 07355-NM-6
 Version A

Table 5-3 Summary of Monitoring Results – Location 3 – Corner Keira & Fox Streets

Start Date & Time	Period	Criteria (dBA)	BarnOwl® PKCT Direction (contribution) LAeq (dBA)	BarnOwl® All Noise LAeq (dBA)	SLM LA90 (dBA)	Wind Speed (m/s) and Direction	Stability Class	Compliance	Observations
20 Sept 2012 17:15 – 17:30	Day	51	<49	64	56	2.4 – 2.8 m/s; NE - NNE	C to D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 17 truck movements witnessed.
20 Sept 2012 21:35 – 21:50	Evening	50	<44	59	44	0.7 – 1.1 m/s; NW - N	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 8 truck movements witnessed.
20 Sept 2012 21:50 – 22:05	Evening	50	<44	59	44	0.7 – 1.1 m/s; NW - NNW	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 7 truck movements Witnessed.
21 Sept 2012 00:25 – 00:40	Night	49	<35	50	38	1.7 – 3.8 m/s; NbE - W	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 9 truck movements witnessed, a train stopping/starting engine periodically and a ship loading at berth 2 during the last 5 minutes of measurement.
21 Sept 2012 00:40 – 00:55	Night	49	<40	55	40	1.7 – 3.8 m/s; NbE - NNE	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 7 truck movements witnessed, a train stopping/starting engine periodically and a ship loading at berth 2.

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Attachment “B” Summary of PKCT Throughput and Receivals

Shiploading and Receivals: 2012/13- July- December 2012

Shiploading July-December 2012	Coal		Coke	Total
	Coking	Steaming		
Berth 101: Bulk Products Berth	-	0	105,300	105,300
Berth 102: Coal Berth	4,320,584	2,708,871	-	7,029,455
			Total (tonnes)	7,134,755

Receivals July-December 2012	Private Road	Public Road	Total
road receival	1,489,237	1,999,353	3,488,590
rail receival			3,651,878
		Total (tonnes)	7,303,756

Attachment “C” Road Transport Complaints & Incidents Summary
Incidents: July-December 2011

INCIDENTS/ACCIDENTS	Minor Damage						Major Damage					
	Transport Provider											
	BT	Ca	ME	Br	SCE	TR	BT	Ca	ME	Br	SCE	TR
Westcliff/ PKCT (BHPB)												
Appin Road												
Bulli Tops												
Mt Ousley												
Masters Road												
Springhill Road												
NRE/PKCT												
Bellambi Lane												
Northern distributor										1		
Masters Road												
Springhill Road												
ICC/PKCT												
Northern distributor												
Masters Road												
Springhill Road												
Tom Thumb Road (private)												
Port Kembla Road PKCT Road Receival PKCT site						1						

Key:

- BT: Bulktrans P/L
- Ca: Camsons P/L
- ME: ME Transport Services
- Br: Brindles P/L
- SCE: South Coast Equipment P/L
- TR: Trazblend/ Sada Group



Complaints: July-December 2011

COMPLAINTS	Noise						Dust						Speed						Other						Total				
	Transport Provider																												
	BT	Ca	ME	Br	SCE	TR	BT	Ca	ME	Br	SCE	TR	BT	Ca	ME	Br	SCE	TR	BT	Ca	ME	Br	SCE	TR					
Westcliff/ PKCT (BHPB)																													
Appin Road																									1				1
Bulli Tops																									1				1
Mt Ousley																									1				1
Masters Road																													
Springhill Rd																													
NRE/ PKCT																													
Bellambi Lane										1																	3		4
Northern Distributor																													
Masters Road																													
Springhill Rd																													
ICC/PKCT																													
Northern Distributor																													
Masters Road																													
Springhill Rd																													
Tom Thumb Road (private)																													
Pt Kembla Rd																													
PKCT Road																													
Receival																													
PKCT Site																													
Totals										1															3				7

Attachment “D” Road Transport Report- July-December 2012

Monthly Reports Summary	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	YTD
Tonnes - Public Road	375,083	412,964	384,814	269,755	333,165	233,694	2,009,475
Tonnes - Private Road	276,423	290,146	270,665	226,609	239,649	185,745	1,489,237
Total road tonnes	651,506	703,110	655,479	496,364	572,814	419,439	3,498,712
Spillage - Public Road	0	0	0	0	0	0	0
Incident - Other	0	1	0	0	0	0	0
Impact with other vehicle	1	0	0	0	0	0	1
Incidents Reported to RTA/ police	1	0	0	0	0	0	1
Complaints	3	0	3	1	0	0	7
Inductions % drivers	100	100	100	100	100	100	100
Hours restrictions breach	0	0	0	0	0	0	0
Drivers Observed	375	460	774	484	587	479	3348
Driver observations/ audits	4	4	0	2	64	65	17
Audits- Industry Audits e.g. truckalyser, NVAS, vehicle	56	35	19	39	39	9	258
Task Observations - PKCT	3	3	5	1	2	3	16

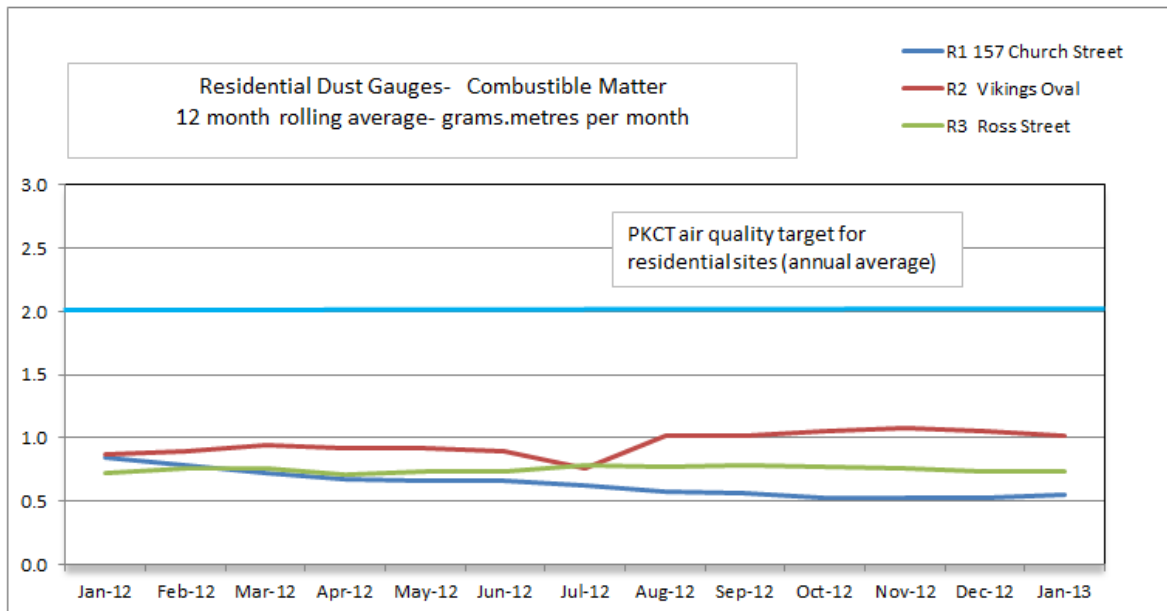
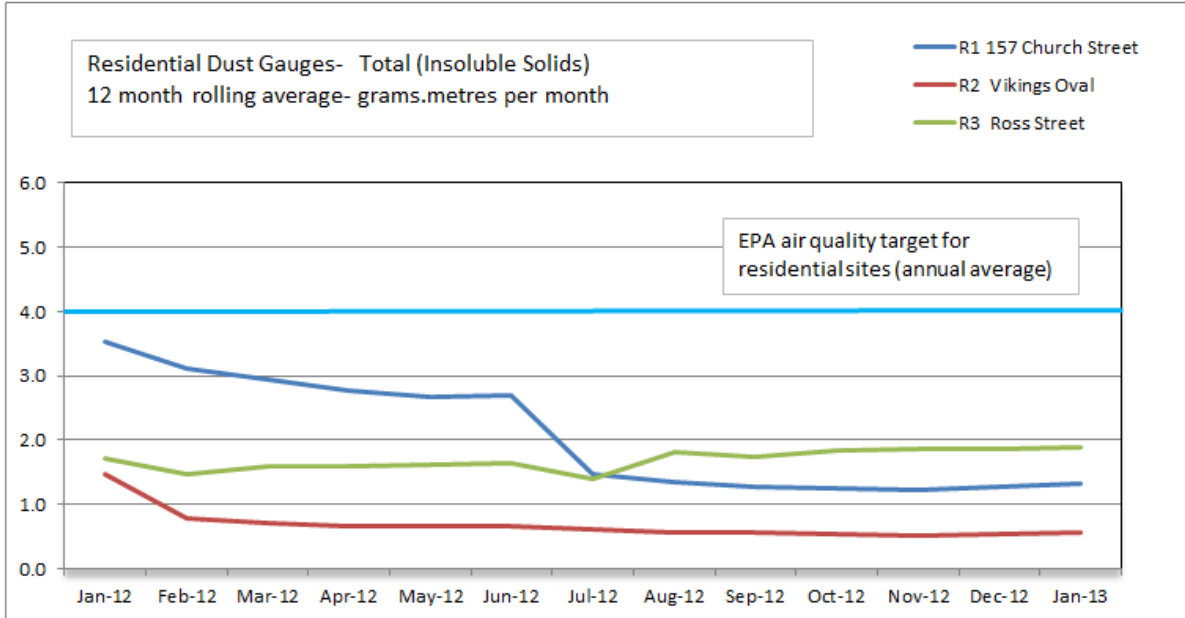
Attachment "E" Air Quality- Monitoring Sites



Location of EPL Air Quality Monitoring Sites

- Dust Gauges- EPA EPL sites ● Bluescope High Volume Sampler/ EPA EPL P11 ●
- Continuous Dust Monitor Sites ●
- PKCT Site Boundary

Attachment “F” Air Quality: Dust Deposition
Residential Sites – 12 month rolling average





Attachment “G” Air Quality: Continuous Dust Data

July- December 2012

Table 6 Maximum recorded 24-hour average TSP concentrations at the northern PKCT monitoring site during July to December 2012 by month (trigger level of 90 µg/m³)

Monitoring period	Maximum concentration (µg/m³)	Number of exceedances
July 2012	37.3	0
August 2012	63.5	0
September 2012	111.1	2
October 2012	167.4	9
November 2012	292.5	10
December 2012	366.5	10
<i>Total exceedances</i>		31

Table 7 Maximum recorded 24-hour average PM₁₀ concentrations at the northern PKCT monitoring site during July to December 2012 by month (air quality standard of 50 µg/m³)

Monitoring period	Maximum concentration (µg/m³)	Number of exceedances
July 2012	27.7	0
August 2012	43.2	0
September 2012	83.8	5
October 2012	119.1	16
November 2012	233.6	19
December 2012	291.8	14
<i>Total exceedances</i>		54

Table 8 Annual average concentrations of TSP and PM₁₀ recorded at the PKCT northern monitoring site during July to December 2012

Pollutant	Standard/ trigger level (µg/m³)	Rolling annual average January – December 2012 (µg/m³)	Six-month average July – December 2012 (µg/m³)
TSP	90	49.5	60.0
PM ₁₀	30	37.1	44.3



Attachment “G” Air Quality: Continuous Dust Data (continued)

Table 9 PKCT contribution ratings for exceedance days during July 2012 to December 2012

PKCT contribution rating	Number of TSP exceedance days with rating	Number of PM ₁₀ exceedance days with rating
None	7	12
Minimal (0% to 10%)	14	25
Minor (10% to 30%)	8	13
Moderate (30% to 70%)	2	3
Major (70% to 100%)	0	0
Unclassified (missing data)	0	1
Total exceedance days	31	54

On the following two exceedance days the activities of PKCT were estimated to have made a moderate (30% to 70%) contribution to the exceedance of the 24-hour average TSP trigger of 90 µg/m³:

- 18 December 2012
- 20 December 2012

On the following three exceedance days the activities of PKCT were estimated to have made a moderate (30% to 70%) contribution to the exceedance of the 24-hour average PM₁₀ criterion of 50 µg/m³:

- 26 November 2012
- 18 December 2012
- 20 December 2012

NB Re. Table 9, the number of exceedance days where PKCT was assessed as having a minor or higher contribution for TSP and PM10 was 0.06% and 0.09% respectively across the reporting period.

Attachment “G” Air Quality: Continuous Dust Data (continued)

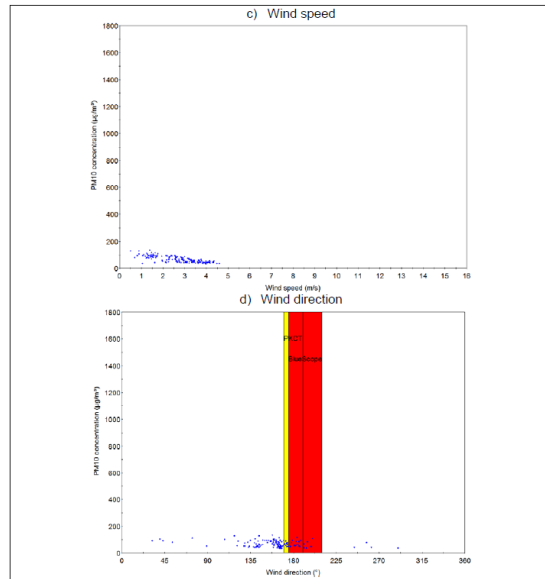


Figure C68 Plot for 26 November 2012 at the PKCT northern monitoring site of the 10-minute average PM₁₀ concentration (µg/m³) versus (a) wind speed (m/s) and (b) wind direction (°)

Location: PKCT northern	Period: 26 November 2012	Data source: PKCT	Units: µg/m ³ , m/s and °
Type: Scatter plot	Prepared by: 144 10-minute average records	Date: Adam Thomas	Date: January 2013

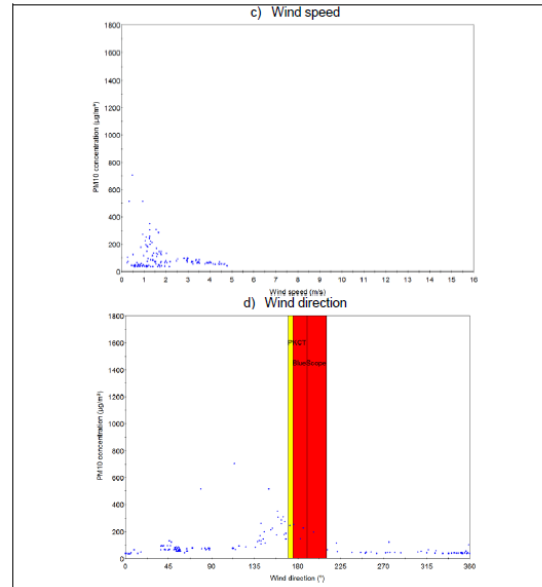


Figure C80 Plot for 18 December 2012 at the PKCT northern monitoring site of the 10-minute average PM₁₀ concentration (µg/m³) versus (a) wind speed (m/s) and (b) wind direction (°)

Location: PKCT northern	Period: 18 December 2012	Data source: PKCT	Units: µg/m ³ , m/s and °
Type: Scatter plot	Prepared by: 144 10-minute average records	Date: Adam Thomas	Date: January 2013

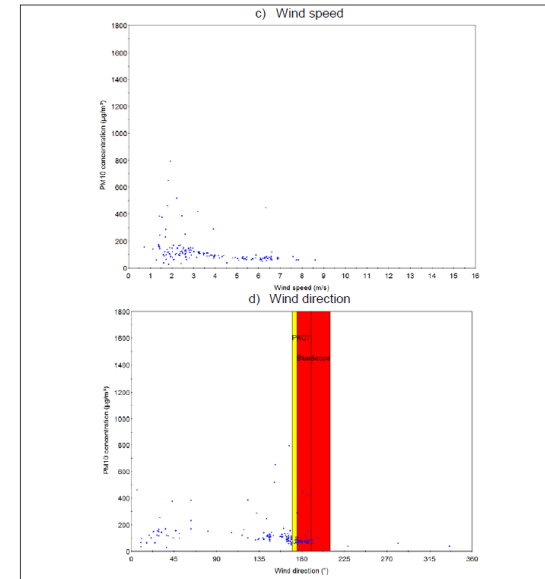


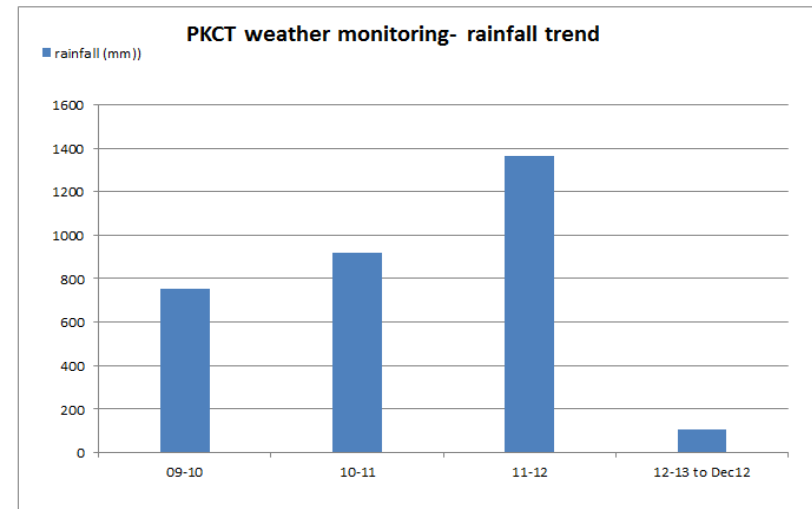
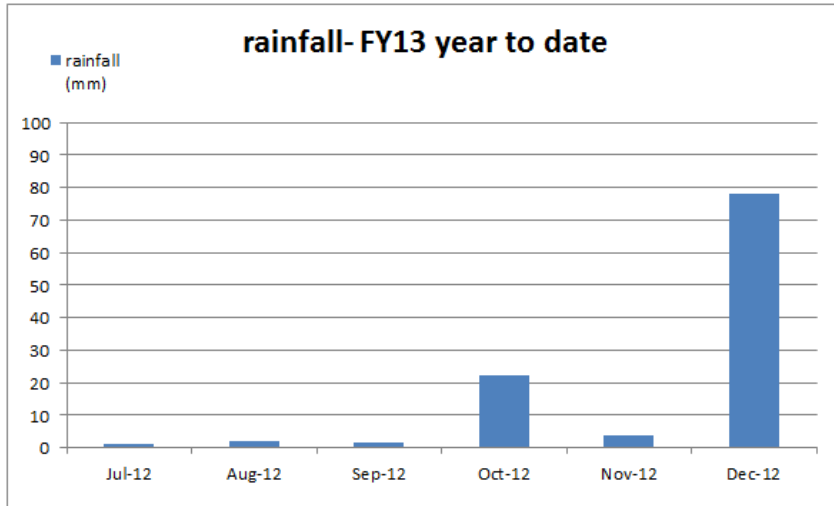
Figure C82 Plot for 20 December 2012 at the PKCT northern monitoring site of the 10-minute average PM₁₀ concentration (µg/m³) versus (a) wind speed (m/s) and (b) wind direction (°)

Location: PKCT northern	Period: 20 December 2012	Data source: PKCT	Units: µg/m ³ , m/s and °
Type: Scatter plot	Prepared by: 144 10-minute average records	Date: Adam Thomas	Date: January 2013

Note 1: PKCT assessed as “moderate” contributor for 24 hour TSP, PM10 exceedances; continuous monitor site C1 is located off site approximately midway between PKCT and the residential boundary.



Attachment “H” Weather Monitoring Summary- July- December 2012



First 6 months have been very dry reflected by the trend charts above. Rainfall, when it has occurred, has generally been of intense and of short duration.

year/month	Rainfall (mm)	Max Temperature degrees C	Min Temperature degrees C	WIND Max. Speed metres/sec	WIND Average Speed metres/sec
Jul-12	0.86	17.9	n/a	16.8	6.1
Aug-12	2.22	26.8	n/a	25.1	6.0
Sep-12	1.05	32.8	n/a	22.3	5.3
Oct-12	22.15	31.3	n/a	24.5	5.0
Nov-12	3.67	29	n/a	19.9	4.9
Dec-12	78.3	32.4	n/a	24.6	5.7

N.b. n/a data not available

Attachment “H”- Weather Monitoring Summary- July- December 2012 (continued)

Wind Rose – Monitors C1 &C2 (refer Atatchment “E” for locations)

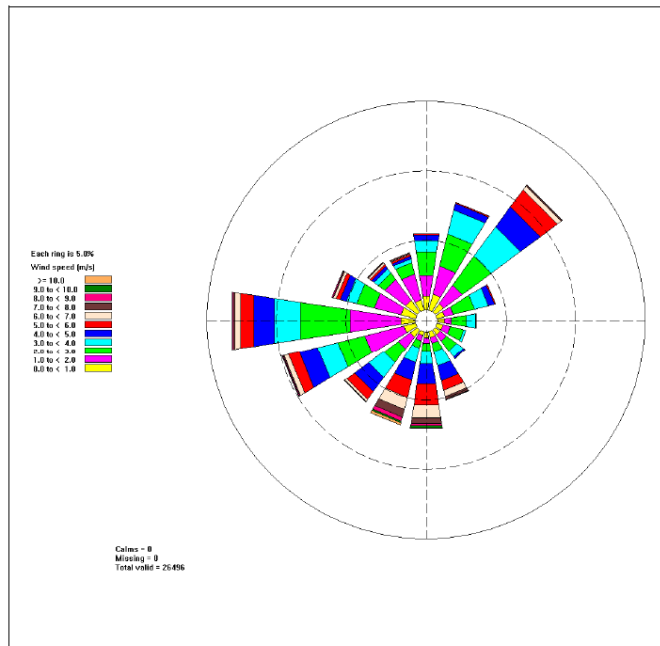


Figure 2 Wind rose for the 10-minute average winds recorded at PKCT northern monitoring site during the July to December 2012 period

Location: PKCT northern	Period: July 2012 to December 2012	Data source: PKCTL	Units: m/s and °
Type: Annual wind rose	13,248 10-minute average records	Prepared by: Adam Thomas	Date: January 2013

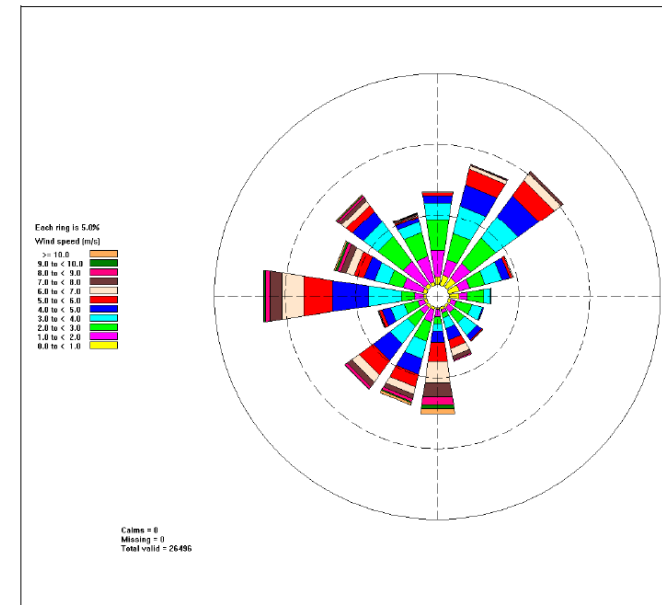
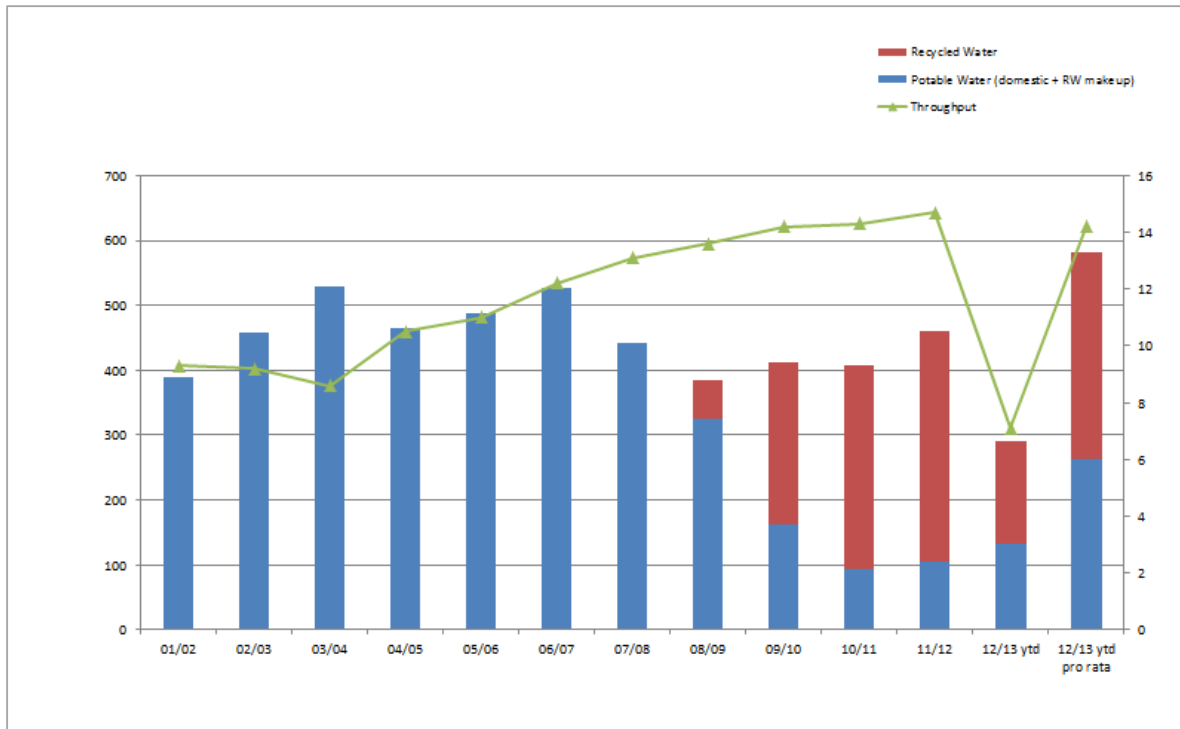


Figure 4 Wind rose for the 10-minute average winds recorded at PKCT southern monitoring site during the July to December 2012 period

Location: PKCT southern	Period: July 2012 to December 2012	Data source: PKCTL	Units: m/s and °
Type: Annual wind rose	13,248 10-minute average records	Prepared by: Adam Thomas	Date: January 2013

Attachment "I" Water Usage Report

Chart "E1" Historical Water usage



1. Chart shows the trend in potable water reduction.
2. Chart shows a trend in overall water usage reduction.

Usage- megalitres	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total FY13 YTD	Total FY12 YTD
recycled water	25799	16969	36634	29447	21549	28726	159124	168,902
potable water- process	11479	35247	10749	8817	33730	32322	132345	56740
potable water- domestic	1803	987	1371	2187	1743	1743	9834	9115
Total	39081	53203	48755	40451	57022	62791	301303	234757
% recycled water/ total	69.2	32.5	77.3	77.0	39.0	47.1	54.6	74.9

Notes: reduction in recycled water usage primarily due to Sydney Water supply problems.

Attachment “K” Settlement Lagoon Discharges: July-December 2012

SETTLEMENT LAGOON OVERFLOW: ENVIRONMENT PROTECTION LICENCE MONITORING: POINT 16						
Environment Protection Licence: 1625			water quality parameter		EPL Limit (100 percentile)	
Type of Monitoring: water quality Frequency: daily grab sample when			pH		6.5-9.5*	
			total suspended solids		less than 50	
			oil/ grease (milligrams per litre)		less than 10	
Sample Date	Date Results Obtained	Date Published	pH (pH units)	total suspended solids (milligrams per litre)	oil/ grease (milligrams per litre)	Commentary on Results
02/04/2012	01/05/2012	31/10/2012	9.3	11	less than 5	EPL compliant
19/04/2012	01/05/2012	31/10/2012	7.3	12	less than 5	EPL compliant
20/04/2012	01/05/2012	31/10/2012	7.1	23	less than 5	EPL compliant
21/04/2012	01/05/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
27/04/2012	01/05/2012	31/10/2012	7.5	less than 5	less than 5	EPL compliant
29/04/2012	01/05/2012	31/10/2012	7.7	less than 5	less than 5	EPL compliant
30/04/2012	01/05/2012	31/10/2012	7.1	10	less than 5	EPL compliant
25/05/2012	23/06/2012	31/10/2012	7.2	8	less than 5	EPL compliant
05/06/2012	03/07/2012	31/10/2012	7.5	5	less than 5	EPL compliant
08/06/2012	03/07/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
11/06/2012	03/07/2012	31/10/2012	7.4	less than 5	less than 5	EPL compliant
12/06/2012	03/07/2012	31/10/2012	7.3	8	less than 5	EPL compliant
13/06/2012	03/07/2012	31/10/2012	7.3	5	less than 5	EPL compliant
14/06/2012	03/07/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
17/06/2012	03/07/2012	31/10/2012	7.1	10	less than 5	EPL compliant
26/06/2012	03/07/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
27/06/2012	03/07/2012	31/10/2012	7.1	less than 5	less than 5	EPL compliant
06/07/2012	04/08/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
11/07/2012	04/08/2012	31/10/2012	7.2	less than 5	less than 5	EPL compliant
12/07/2012	04/08/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
13/07/2012	04/08/2012	31/10/2012	7.5	less than 5	less than 5	EPL compliant
14/07/2012	04/08/2012	31/10/2012	7.3	less than 5	less than 5	EPL compliant
15/07/2012	04/08/2012	31/10/2012	7.0	less than 5	less than 5	EPL compliant
12/10/2012	06/11/2012	16/11/2012	9.7	60	less than 5	pH,total suspended solids marginally outside EPL limits; algae control trial in progress
13/11/2012	10/12/2012	18/12/2012	6.6	less than 5	less than 5	EPL compliant
28/11/2012	10/12/2012	18/12/2012	9.4	18	less than 5	EPL compliant
19/12/2012	09/01/2013	23/01/2013	9.3	30	<5	EPL compliant

* "Date Published" refers to this report. Data pertaining to April-June 2012 also published earlier in Environmental Monitoring Report May 2012 and the Annual Environment Management Report for 2011/12.

Environment Protection Licence 1625- Monthly Report

Publish Date: 23rd January 2013

Extract from December 12 Monthly Report- refer www.pkct.com.au

N.b. introduction of recycled water use on site (in April 2009) has increased the nutrient levels in run off water together with algal growth particularly in the settlement lagoon. Increased pH has been detected during this period. Investigation is in progress and is being undertaken by PKCT in consultation with EPA.



Attachment "L" Greenhouse Gas Report- July- December 2012

2012/2013 YTD (July-December)	A		B	C	D	E
	Reporting unit	Amount consumed (reporting unit)	Energy content (GJ per reporting unit)	Emissions factor (kg CO2-e per GJ)	Reportable energy (GJ)	Reportable emissions (tonnes CO2-e)
Scope 1 – direct emissions					Gigajoules	tonnes
Diesel oil(transport)	kL	0	38.60	69.90	0	0
Diesel oil (stationary energy)	kL	0	38.60	69.50	0	0
Biodiesel B20	kL	106	30.88	69.51	3273	228
Petrol (transport)	kL	14	34.20	69.60	479	33
Petroleum based oils	kL		38.80	27.90	0	0
Petroleum based greases	kL		38.80	27.90	0	0
Acetylene	m3 *		0.0393	51.33	0	0
Scope 2 – indirect emissions						
	Reporting unit		Energy content (GJ per kWh)	Emissions factor (kg CO2-e per kWh)		
Electricity	kWh	11,679,482	0.0036	0.89	42046	10395
Total					42525	10428
Threshold					100,000	25,000

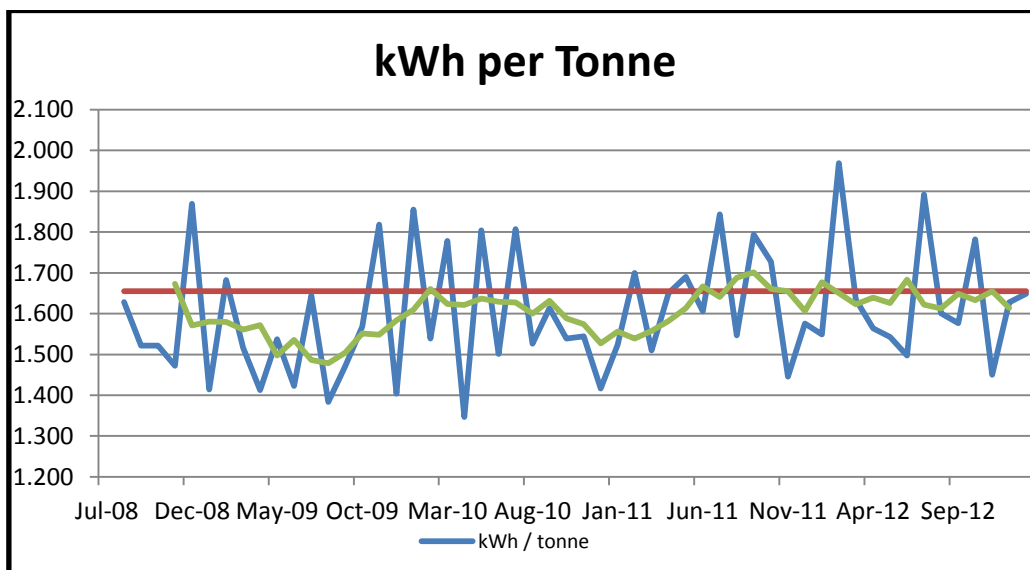
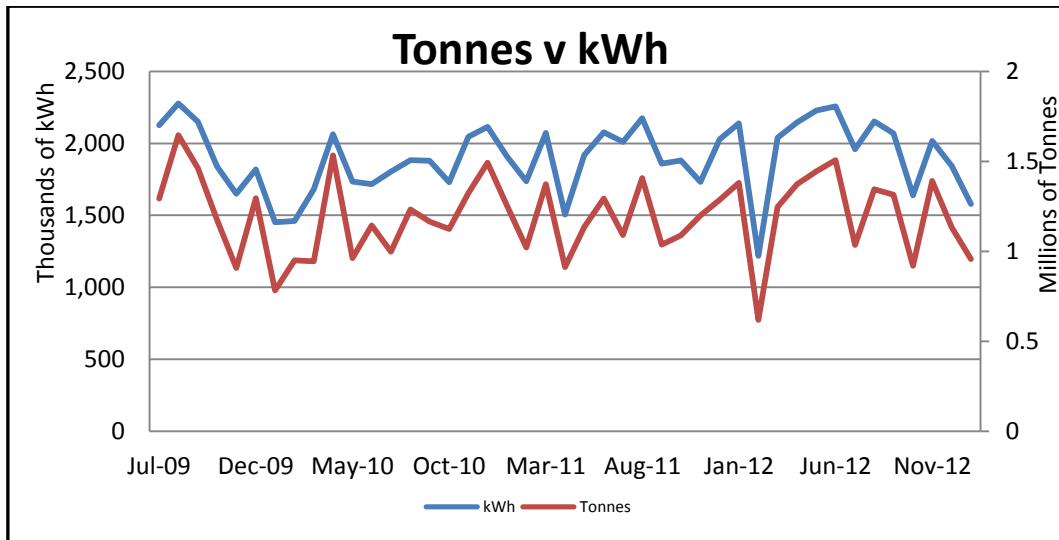
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Attachment "M" Electricity Usage Report to January 2013



Financial year	E: kw hr per tonne	baseline	E to baseline
FY09	1.550	1.655	-6.3%
FY10	1.560	1.655	-5.7%
FY11	1.580	1.655	-4.5%
FY12	1.620	1.655	-2.1%
FY12 ytd	1.640	1.655	-0.9%



Attachment "N" Waste Report July-December 2012

To be advised- not currently available