Annual Environmental Management Report

1st July 2012 to 30th June 2013

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this Annual Environment Management Report (AEMR) is to provide the Department of Planning and Infrastructure (DP&I) and other stakeholders a report of Port Kembla Coal Terminal's (PKCT's) environmental performance together with actions taken in relation to environmental control and regulatory compliance across the July 2012 to June 2013 reporting period.

1.2 Scope

This AEMR provides information on PKCT's compliance with requirements of the PKCT Major Project Approval 08_0009 which was granted on the 12th June 2009. The approval includes a requirement of PKCT to prepare an annual AEMR. By letter of 25th March 2010, the DP&I approved a PKCT request for the submission date to be the 31st July annually to facilitate financial year reporting.

This report has been prepared with reference to the NSW Department of Primary Industries (now Department of Industry & Investment) Guidelines and Format for Preparation of an Annual Environmental Management Report dated January 2006.

This report will be submitted to the DP&I. Following DPI feedback, it will be forwarded to the Environment Protection Authority (EPA) and the Department of Trade and Investment (DTI) or as required by the respective agencies. A copy of this AEMR will also be made available to the public via the PKCT website.

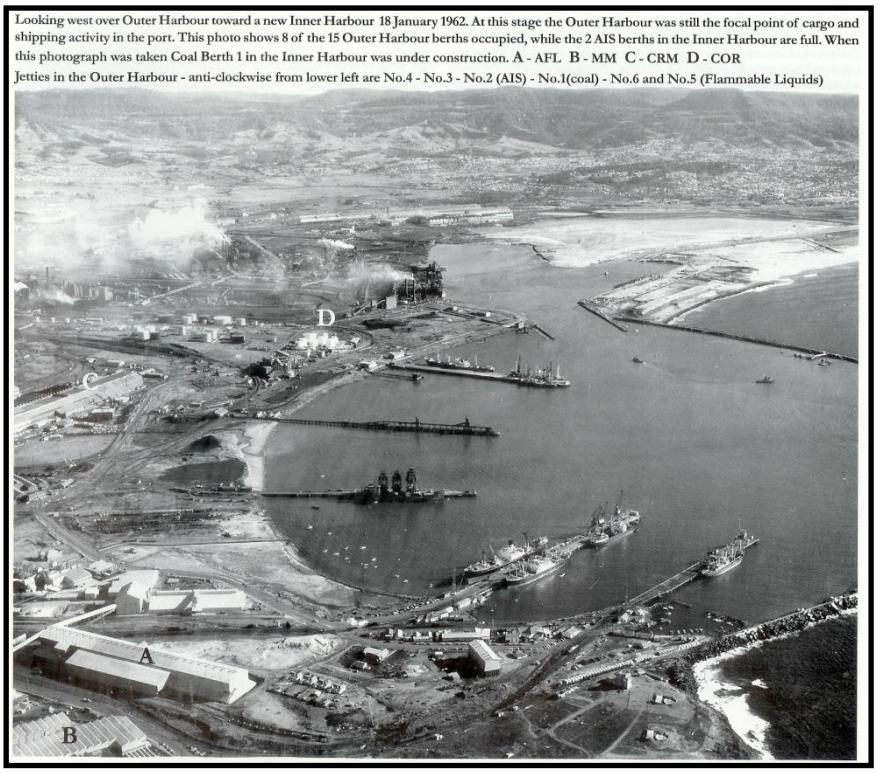
1.3 Background

PKCT is located on Lot 22 in DP 1128396 on the northern side of the Inner Harbour of Port Kembla, near Wollongong. On the 31st May 2013, NSW Ports acquired a long term lease of Port Kembla and Port Botany through which the current leasing arrangement with PKCT remains. Land is leased to PKCT under a 20 year, plus 20-year option. The lease commenced in August 1990 and PKCT has executed this option taking the lease period to 2030.

Six equal shareholders, namely BHP Billiton Illawarra Coal (BHPBIC), Oakbridge (Xstrata Coal), Centennial Coal, Tahmoor Coal and Metropolitan Collieries (Peabody) and Gujarat NRE, form the PKCT Board to operate the Terminal. BHPBIC has managed the Terminal since 1990. PKCT is the major coal intermodal facility in southern NSW for the transfer of coal from rail and road to ship.

The Terminal is responsible for receiving, assembling and loading coal from the Southern and Western New South Wales coalfields, for transport by ship to international and domestic markets. PKCT has two bulk handling facilities; a high capacity Coal Berth (Berth 102) that handles the loading of coal, and a Bulk Products Berth (Berth 101) that loads and unloads a range of bulk products (Refer to **Figure 1**).

The Bulk Products Berth was constructed in the early 1960's after construction of Port Kembla Inner Harbour (refer photo below). The Coal Berth was constructed in the early 1980's.



Reference: From "Roadstead to World Class Port", Port Centenary Committee 1999

PKCT entered the lease to operate the facility in accordance with a development consent from Wollongong City Council and Environment Protection Authority Environment Protection Licence (EPL) number 1625.

In 2008, PKCT commenced preparation of a Major Project application under Part 3A of the Environmental Planning & Assessment Act (EPAA) 1979 seeking consent to alter coal receival arrangements by public road.

Consultation with the Department of Planning and Infrastructure (DP&I) resulted in the remit of the application with the scope being increased to include consent for PKCT's existing operations. The Environmental Assessment (EA) submitted with the Major Project Application includes an assessment of all environmental impacts associated with the current and ongoing PKCT activities.

In June 2009, the DP&I conditionally approved PKCT's Major Project Application (08_0009) for Existing Operations & Increased Road Receival Hours. This consent replaces the previous development approval from Wollongong City Council (WCC) and sets new conditions for environmental impacts, management and reporting.

Figure 1

1.4 Objectives

The objective of this AEMR is to provide a report that outlines the environmental monitoring, mitigation, assessments and management actions undertaken by PKCT over the July 2012- June 2013 reporting period.

1.5 Environment Management

PKCT has an Environment Management System (EMS) in place to meet its environmental obligations. The EMS is certified to AS/NZS ISO 14001 and is supported by policies, standards, an environment management strategy, management plans and procedures. Key documents include the following;

- Sustainable Development Policy PO.BM.291
- Environment Policy PO.HS.85
- Quality Policy PO.BM.236
- Environment Management Strategy MP.HS.464
- Noise Management Plan MP.HS.387
- Air Quality Management Plan MP.HS.386
- Driver Code of Conduct Implementation Plan MP.BM.453
- Water Management Plan MP.HS.462
- Green and Golden Bell Frog Management Plan MP.HS.109
- Landscape Management Plan MP.HS.470
- Greenhouse Gas and Energy Efficiency Management Plan MP.HS.461
- Waste Management Plan MP.HS.460
- Fire Management Plan MP.HS.459

Policies are published on PKCT's web site. Management Plans required under Project Approval 08_0009 are also published once Department of Planning and Infrastructure approval is obtained.

1.6 Terminal Contact

Table 1.2 identifies relevant contacts at PKCT

Table 1.2 – PKCT Contact Details

PKCT Employee & Position	Contact Details
Mr. Peter Green General Manager	(02) 4228 0288 Peter.Green@pkct.com.au
Mr. Alex Chalk Risk Manager	(02) 4221 1877 Alex.Chalk@pkct.com.au
Mr. Luke Pascot Environmental Specialist	(02) 4221 1155 Luke.Pascot@pkct.com.au
Community Hotline	1800 111 448 communitylinks@pkct.com.au

1.7 Actions Arising from Previous AEMR Review

This section reports on any actions or comments arising from the DP&I's review of the 2011/12 AEMR submitted by PKCT.

By e mail of 3rd October 2012, the DP&I provided comments having reviewed the AEMR. By e mail of 30th October 2012, PKCT provided a response to the DP&I's comments and, where appropriate, revised the AEMR (Version 2). The revised 2011/12 AEMR has been uploaded to PKCT's website replacing the previous version.

2.0 ADMINISTRATIVE CONDITIONS

This section identifies the Administrative Conditions in Schedule 2 of the PKCT Major Project Approval 08_0009 and describes how PKCT complies with these requirements.

Table 2.1 provides an overview of the administrative conditions and references the applicable section of this AEMR.

Table 2.1 – Administrative Condition Reference

Administrative Condition	AEMR Section
Obligation to Minimise Harm to the Environment	2.1
Terms of Approval	2.2
Limits on Approval	2.3
Management Plan / Monitoring Programs	2.4
Surrender of Consents	2.5
Structural Adequacy	2.6
Demolition	2.7
Operation of Plant & Equipment	2.8
Dispute Resolution	2.9

2.1 Obligation to Minimise Harm to the Environment

2.1.1 Consent Condition

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the operation of the project.

2.1.2 Compliance Statement

Consent condition is consistent with PKCT's polices and management standards including a commitment to meet legal and other requirements.

PKCT has identified the aspects associated with PKCT's operation which may result in environmental impacts and appropriate management plans and processes are in place providing monitoring, assessment and control.

In accordance with continual improvement, performance is monitored, reviewed and feasible improvement and mitigation measures are developed. PKCT implements reasonable and feasible measures within suitable time frames to minimise harm to the environment.

Environmental aspects including those referenced herein are considered and assessed in project development through PKCT's capital works program and business planning process.

Further, the findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 have been noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009 (refer Section 4.4). A status report is included in **Attachment F** herein. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

2.2 Terms of Approval

2.2.1 Consent Condition

2. The Proponent shall carry out the project generally in accordance with the: (a) EA; (b) Response to Submissions; (c) Statement of Commitments (see Appendix 2); and (d) Conditions of this approval.
3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall prepare revisions of any strategies, plans or programs required under this consent if directed to do so by the Director-General. Such revisions shall be prepared to the satisfaction of, and within

a timeframe approved by, the Director-General.

5. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with this approval; and
   (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence.

2.2.2 Compliance Statement

The requirements pertaining to this condition were met over the reporting period. The Environment Management Strategy has been developed to facilitate the means by which DP&I approval conditions are met. The AEMR provides an annual compliance report.

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 were noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009 (refer Section 4.4). A status report is included in **Attachment F** herein. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

2.3 Limits on Approval

2.3.1 Consent Condition

6. The Proponent shall not receive more than 7.5 million tonnes of coal and bulk products at the site by public road in any calendar year without the written approval of the Director-General. In seeking this approval, the Proponent shall submit a report to the Director-General that:
   (a) reviews the transport related impacts associated with the trucks being used to deliver coal and bulk products to the terminal;
   (b) demonstrates that these impacts are generally consistent with the predicted and/or approved impacts; and
   (c) examines whether there any other reasonable and feasible measures that could be implemented to minimise these impacts.

   Once this approval has been obtained, the Proponent shall not receive more than 10 million tonnes of coal and bulk products at the site by public road in any calendar year.

7. The Proponent shall only receive coal dispatched from NRE No 1 Colliery at Russell Vale if that coal has been dispatched between the hours of:
   (a) 7 am to 10 pm Monday to Friday; and
   (b) 8 am to 6 pm Saturday and Sunday or Public Holidays

   unless in accordance with a project approval granted to that Colliery under Part 3A of the EP&A Act.

8. Subject to conditions 6 and 7 of this schedule, coal and bulk products may be received by the Proponent at the site by road delivery twenty four hours per day, seven days per week.

2.3.2 Compliance Statement

PKCT road deliveries by public road totaled 4,040,578 tonnes across the reporting period (refer **Figure 2A** below) in accordance with the consent condition.

Figure 2A Road Transport Report- 2012/2013

Monthly Reports Summary FY 12/13	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	FY13 Total	Comment
Tonnes - Public Road	375082.6	422964.9	384814.1	287660.4	333165.9	233695.7	240685.8	329372	346224	404319.5	431567	251025.9	4040577.9	
Tonnes - Private Road	276423	290146	270655	226609	239649	185745	124511	219183	273204	219349	293779	361110	2980363	nb primarily rail delivered tonnes to Bluescope then internal road to PKCT
Total road tonnes	651505.6	713110.9	655469.1	514269.4	572814.9	419440.7	365196.8	548555	619428	623668.5	725346	612135.9	7020940.9	
Spillage - Public Road	0	0	0	0	0	0	0	0	0	0	0	0	0	
Incident - Other	0	1	0	0	0	0	0	0	0	0	0	0	1	
Impact with other vehicle	1	0	0	0	0	0	0	0	1	0	0	0	2	
Incidents Reported to RTA	1	0	0	0	0	0	0	0	0	0	0	0	1	
Complaints	3	1	3	1	1	0	0	2	1	7	1	0	20	
EPL/ regulatory breaches	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inductions (%)	100	100	100	100	100	100	100	100	100	100	100	100	100	
Hours restrictions breach	0	0	0	0	0	0	0	0	0	0	0	0	0	
Road Transport Providers (RTP): Observations/ Audits	49	58	78	74	81	74	83	45	54	72	54	45	767	
RTP: Number of drivers observed	377	460	739	564	630	510	603	396	358	567	386	354	5944	
RTP: Trucksafe/NHVAS/Other Audits	51	47	41	46	42	9	36	29	10	24	26	66	427	
CTO / Audits at minesites (Shippers &PKCT)	21	17	18	20	20	21	18	20	22	21	21	17	236	Includes data from Shippers and PKCT
CTO / Audits: At PKCT (Shippers &PKCT)	6	7	4	4	6	8	5	3	3	8	6	3	63	Includes data from Shippers and PKCT
CTO / Audits: Mine to PKCT (Shippers &PKCT)	0	0	0	1	0	2	0	1	3	4	3	4	18	Includes data from Shippers and PKCT
RTP system audits	2	0	0	0	0	0	0	0	0	0	0	0	2	Includes data from Shippers, TRP's and PKCT

NB Private road is rail delivered coal to BlueScope Steel then private road delivery to PKCT.

	2012	2013
Tonnes total (million)	5.4	7
Incident (other)	5	1
Impact other vehicle	3	2
Complaints	19	20
RTP Observations/Audits	302	767
RTP Number Drivers Observed	1591	5944

If it is expected that the 7.5 million tonnes per annum limit will be exceeded, the necessary approval from the Director-General will be sought before doing so. Coal from NRE No. 1 Colliery is only received by PKCT when it is dispatched during the specified hours.

2.4 Management Plans / Monitoring Programs

2.4.1 Consent Condition

9.	With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

2.4.2 Compliance Statement

During the July 2012- June 2013 reporting period, no management plans were submitted to the DP&I.

2.5 Surrender of Consents

2.5.1 Consent Condition

10.	Within 12 months of the date of this approval, the Proponent shall surrender all existing development consents and existing use rights associated with operations at the site in accordance with clause 97 of the EP&A Regulation.

2.5.2 Compliance Statement

Applicable development consents have been surrendered. No action was required in this reporting period.

2.6 Structural Adequacy

2.6.1 Consent Condition

11.	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

2.6.2 Compliance Statement

Project office was constructed during the reporting period (refer Section 4.3.2). Work was carried out in accordance with the Building Code of Australia.

Facilities maintenance is carried out onsite in accordance with legal and other requirements including applicable Australian Standards and the Building Code of Australia.

2.7 Demolition

2.7.1 Consent Condition

12. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures,* or its latest version.

2.7.2 Compliance Statement

During the 2012/13 reporting period, PKCT did not undertake any demolition projects required to conform to Australian Standard AS2601-2001.

2.8 Operation of Plant & Equipment

2.8.1 Consent Condition

13. The Proponent shall ensure that all plant and equipment used onsite is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.

2.8.2 Compliance Statement

PKCT management and staff have a responsibility to maintain equipment to ensure correct operation and efficiency. PKCT ensures all personnel are suitably qualified, trained and competent to ensure equipment is operated in a proper and efficient manner.

2.9 Dispute Resolution

2.9.1 Consent Condition

14. In the event that the Proponent and the Council or a Government agency, other than the Department, cannot agree on the specification or requirements of this approval, the matter may be referred by either party to the Director-General for resolution, whose determination of the disagreement shall be final and binding on the parties.

2.9.2 Compliance Statement

PKCT accepts the dispute resolution process. This condition is also referenced in the Environment Management Strategy.

There were no disputes during the reporting period.

3.0 SPECIFIC ENVIRONMENTAL CONDITIONS

This section identifies the Specific Environmental Conditions in Schedule 3 of the PKCT Major Project Approval 08_0009 and describes how PKCT complies with these requirements.

Table 3.1 provides an overview of the administrative conditions and references the applicable section of this AEMR.

Table 3.1 – Specific Environmental Conditions Reference

Specific Environmental Condition	AEMR Section
Noise	3.1
Transport	3.2
Air Quality	3.3
Meteorological Monitoring	3.4
Surface Water	3.5
Biodiversity	3.6
Visual Amenity	3.7
Greenhouse & Energy Efficiency	3.8
Waste	3.9
Hazards	3.10
Fire Control	3.11

3.1 Noise

3.1.1 Consent Condition

EPL 1625 & Major Project Approval 08_0009 pertains to noise emissions from PKCT's premises. Noise criteria are outlined as follows;

1. 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 dB(A) $L_{Aeq\ (15\ min)}$

Location	Time Period	Limits ($LA_{eq,15\ min}$ 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:

(a) To determine compliance with the $L_{Aeq\ (15\ minute)}$ 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.

(b) 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 3ºC/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.

Noise Monitoring Program

2. The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General. This program must:
   (a) be developed in consultation with DECC;
   (b) 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; and
   (c) include a:
   - combination of attended and unattended noise monitoring measures;
   - noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval; and
   - reasonable and feasible best practice noise mitigation measures to ensure project specific noise criteria are met.

Continuous Improvement

3. The Proponent shall:
   (a) continue to implement all reasonable and feasible best practice noise mitigation measures;
   (b) continue to investigate ways to reduce the noise generated by the project, including maximum noise levels which may result in sleep disturbance; and
   (c) report on these investigations and the implementation and effectiveness of these measures in the AEMR

   to the satisfaction of the Director-General.

3.1.2 Compliance Statement

Routine noise surveys were undertaken in September 2012 and February 2013. A summary of monitoring data is provided in **Attachment A** herein. Noise surveys determined that PKCT noise levels were within the noise criteria in EPL 1625 and DP&I Approval 08_0009.

During the reporting period, noise consultant, Wilkinson Murray, undertook a review of meteorological data across a 4 year period. As PKCT undertakes bi annual surveys, the purpose of the study was to identify across which months the adjacent residential areas would be most sensitive to noise from PKCT's operation. The study concluded that, subject to representative operations occurring, December and March were the best months to undertake noise surveys. Future noise surveys will be scheduled accordingly.

Section 4.3 reports on environmental performance, the analysis of results and consideration of trends.

There were no noise related community complaints made during the reporting period associated with PKCT's site operations.

No notable noise reduction projects were undertaken during the reporting period at PKCT.

Noise from both an occupation health and safety (OHS) and environmental perspective is a key aspect and is taken into account in project development. In accordance with Section 2.1.2, noise was included in project assessment criteria most notably as follows;

(a) Ship loader 1 and 2 refurbishment – Consideration of potential noise impacts was captured in the initial planning phase of this project. Noise constraints were considered when investigating sandblasting equipment for the project and testing of this equipment has been undertaken during daylight hours.

(b) North Truckwash Upgrade – variable speed pumps were adopted for this project offering energy efficiency and noise reduction benefits. Considering PKCT's 24/7 road receival operation, quieter operation will provide a benefit particularly across night time hours.

3.2 Transport

3.2.1 Consent Condition

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.

3.2.2 Compliance Statement

In accordance with Condition 4, **Figure 2A** and **Figure 3A** below provide a summary of throughput and receival over the reporting period.

Figure 3A Summary of PKCT Throughput and Receivals – 2012/2013
Shiploading

	Coal		Coke	Total
	Coking	Steaming		
Berth 101: Bulk Products Berth	-	0	180,376	180,376
Berth 102: Coal Berth	8,152,503	4,957,692	-	13,110,195
			Total (tonnes)	13,290,571

Figure 3A Summary of PKCT Throughput and Receivals -2012/2013 (Continued)

Receivals

Deliveries (Tonnes)	Private Road	Public Road	Total
Road Receival	2,980,363	4,040,578	7,020,941
Rail Receival			6,461,513
		Total Tonnes	13,482,454

*Note private road is primarily rail transport to BlueScope Steel, then road transport by private road to PKCT (refer **Figure 2A** Road Transport Report- 2012/2013).

There has been no incident of trucks queuing on Springhill Road over the July 2012-June 2013 reporting period. In accordance with Condition 5, this requirement is included in Drivers Code of Conduct Implementation Plan MP.BM.453 and is monitored operationally and reviewed as required during the road user meetings.

The Drivers Code of Conduct Implementation Plan is implemented and includes driver inductions. The Driver's Code of Conduct (DCC) is enforced through the monitoring of trucks by PKCT and road transport companies and shippers.

A Heavy Haulage Induction manual and induction program is in place to support DCC implementation. Reviews are undertaken as required through the road user meetings (refer **Figure 2A** Road Transport Report- 2012/2013).

During this reporting period, meetings were held on 5th July 2012, 26th September 2012, 16th Jan 2013 and 26th June 2013.

Figures 2A and **3B** below provide a summary of monitoring results pertaining to road transport and the DCC. A Road Users Group (PKCT, truck companies and relevant coal and bulk products shippers) meet quarterly to review implementation and monitoring results.

Figure 3B Road Transport Complaints & Incidents Summary and Tonnes – 2012/2013

Incidents/Accidents FY 2013	Minor Damage				Major Damage				
	Transport Provider								
	BT	ME	BR	TB	BT	ME	BR	TB	Total
Westcliff (PKCT/BHPB)									0
Appin									0
Bulli Tops									0
Mt Ousley									0
Masters Road									0
Springhill Road									0
NRE/PKCT									0
Bellambi Lane									0
Northern Distributor			1						1
Masters Road									0
Springhill Road									0
ICC/PKCT									0
Northern Distributor									0
Masters Road									0
Springhill Road									0
Tom Thumb Road (private)									0
Port Kembla Road	1								1
PKCT Road Receival	1								1
PKCT Site									0
Totals	2	0	1	0	0	0	0	0	3

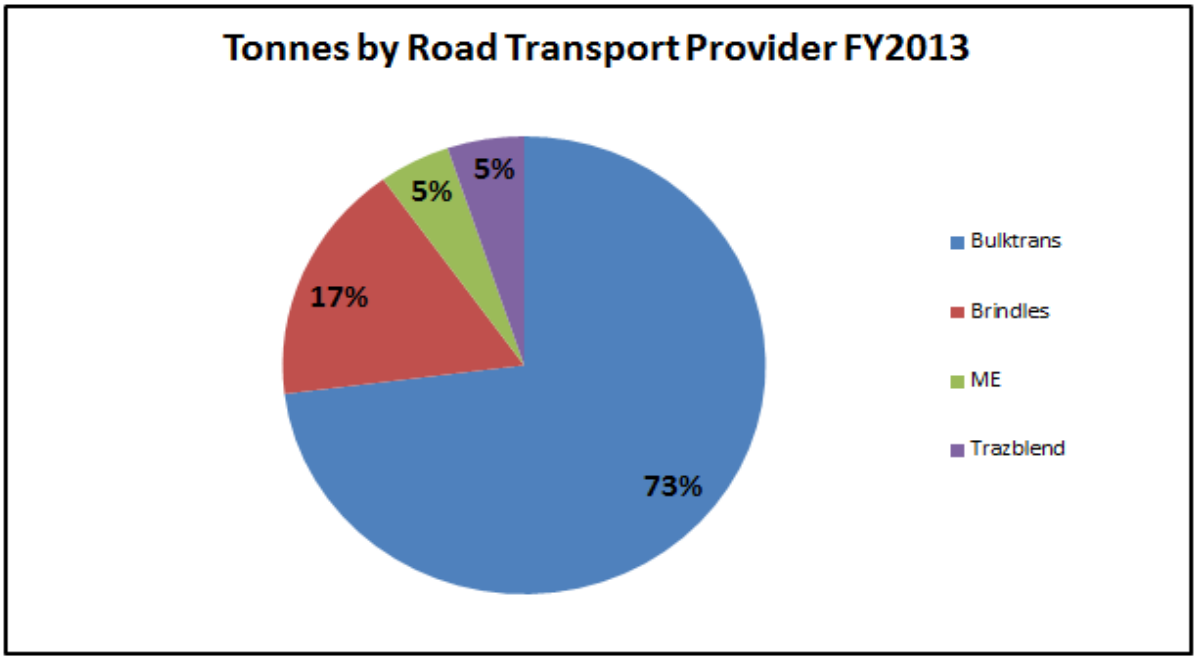
Key: BT: Bulk Trans ME: ME Transport BR: Brindles TB: Trazblend

Complaints FY 2013	Noise				Dust				Speed				Other				
	Transport Provider																
	BT	ME	BR	TB	BT	ME	BR	TB	BT	ME	BR	TB	BT	ME	BR	TB	Total
Westcliff (PKCT/BHPB)													3				3
Appin Road																	0
Bulli Tops																	0
Mt Ousley													1				1
Masters Road																	0
Springhill Road					1								3				4
NRE/PKCT																	0
Bellambi Lane			1				1				2				4		8
Northern Distributor											1						1
Masters Road																	0
Springhill Road															1		1
ICC/PKCT																	0
Northern Distributor																	0
Masters Road																	0
Springhill Road																	0
Tom Thumb Road (private)																	0
Port Kembla Road													1				1
PKCT Road Receival																	0
PKCT Site																	0
Other area													1				1
Totals	0	0	1	0	1	0	1	0	0	0	3	0	9	0	5	0	20

Key: BT: Bulk Trans ME: ME Transport TB: Trazblend BR: Brindles

(Refer also **Figure 2A Road Transport Report- 2012/2013**)

Figure 3B Road Transport Complaints & Incidents Summary and Tonnes – 2012/2013 (continued)



Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 have been noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009 (refer Section 4.3.11). **Attachment F** provides a status report. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

With regard to the DCC and road transport, actions have been taken to increase superintendence, monitoring and control from mine to PKCT. In summary, key improvements over the reporting period are as follows;

- DCC and the Drivers Code of Conduct Implementation Plan are in operation.
- Drivers Code of Conduct audits and driver observations undertaken by the Road Transport Providers and Shippers have increased significantly over the reporting period.
- Total road tonnes have increased from 5.4 million tonnes to 7.0 million tonnes this reporting period while incidents have decreased and complaints have remained stable, **Figure 2A**.
- In discussions with the EPA and DP&I across the reporting period relating to DCC implementation effectiveness, PKCT has proposed to undertake an external consultant review to assess performance and identify improvement opportunities. PKCT is currently awaiting a response from the DP&I. This work is likely to proceed in the latter half of 2013.

3.3 Air Quality

3.3.1 Consent Condition

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/m3
Particulate matter < 10 µm (PM10)	Annual	30 µg/m3

Table 4: Short term impact assessment criteria for particulate matter

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM10)	24 hour	50 µg/m3

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.

Operations

8. The Proponent shall:
   (a) ensure any visible air pollution generated by the project is both minimised and recorded, and that operations are modified as required to minimise any resultant air quality impacts on nearby residences;
   (b) ensure that the real-time air quality monitoring and meteorological monitoring data is assessed regularly; and
   (c) where dust is generated by the project, that operations are modified and/or stopped as required to ensure compliance with the relevant air quality criteria

   to the satisfaction of the Director-General.

9. During carrying out of the project, the Proponent shall ensure that:
   (a) all loaded trucks entering or leaving the site have their loads covered; and
   (b) trucks associated with the project pass through a truck wash before entering the public road network

   to the satisfaction of the Director-General.

Air Quality Monitoring Program

10. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program must:
   (a) be developed in consultation with DECC;
   (b) 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; and

(c) include:

- real-time sampling to monitor the dust emissions of the project;
- an air quality monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this approval; and
- reasonable and feasible best practice emissions mitigation measures to ensure project specific assessment criteria are met.

3.3.2 Compliance Statement

PKCT has an Air Quality Management Plan (AQMP) in place and operational as follows;

- The AQMP, developed in consultation with OEH, was submitted to DP&I by the due date of 9th December 2009. The DP&I approved the AQMP by letter of 25th March 2010.
- EPA assisted in developing the AQMP though did not add any new air quality criteria to EPL 1625.
- Air quality monitoring methodology has been implemented and data is being assessed on a monthly basis. Dust deposition and continuous dust monitoring data is collected. Monitoring locations are shown in **Figure 3D** below.

PKCT's AQMP contains dust monitoring, assessment, reporting and mitigation and management provisions to ensure necessary actions are undertaken and that dust from PKCT's premises does not exceed the criteria in the condition outlined above.

PKCT provides 24/7 site operational control via the Main Control Room (MCR). MCR operators monitor site conditions and weather forecasts. If dust is observed, action is taken through operation of sprays or other available controls. Dust events observed which emanate beyond the immediate source with a potential to have off site impacts are entered into PKCT's event management system, requiring investigation and corrective action. PKCT also has an auditing process in place which includes site observations of dust and the assessment of associated controls.

The requirement that loads must be covered and that use of the truck wash is mandatory prior to leaving site forms part of the Drivers Code of Conduct Implementation Plan and associated inductions. Audits are undertaken and findings are recorded (refer **Figure 2A** Road Transport Report- 2012/2013).

An event was reported by PKCT to the EPA in December 2012 where an inadvertent power isolation by PKCT maintenance personnel caused an interruption to truck wash operation during road deliveries resulting in unwashed trucks leaving the site. **Attachment D** provides an event report and corrective actions

Figure 3C Air Quality- Monitoring Sites

PORT KEMBLA COAL TERMINAL
DUST & WEATHER MONITOR LOCATIONS

30th October 2012

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	Linkside Apartments, Ross Street
	C1	Continuous Dust Monitor 1
	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

PKCT monitors air quality using dust deposition gauges and continuous dust monitors located on site and on adjacent port and residential areas (**Figure 3C** Air Quality- Monitoring Sites).

Figures 3D and 3E below provide a summary of dust data for the northern continuous dust monitor, dust deposition results and trend graphs for PKCT's residential sites.

Figure 3D Air Quality: Continuous Dust Data – July 12 to June 13

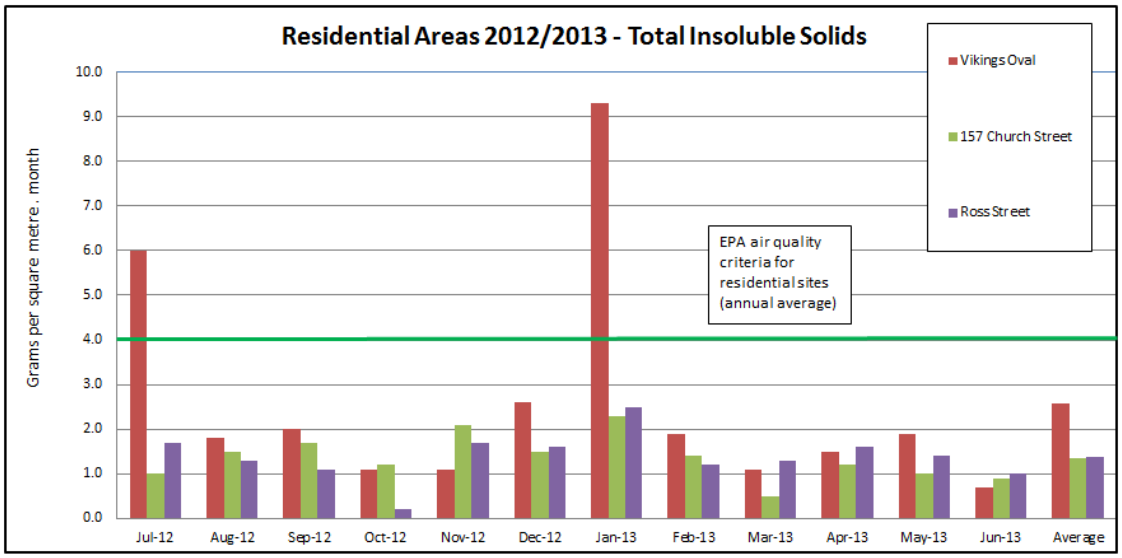
Continuous Dust Monitoring FY 2013											
24 Hour Average Dust Concentrations						PKCT Number of Exceedences (Maximum Contribution %)					
Particle Size	Standard (ug per m3)	Number of Compliant Days	% Compliant	Number of Exceedences	% Not Compliant	None	Minimal	Minor	Moderate	Major	Insufficient Data
TSP	90	303	83	62	17	12 (19%)	24(39%)	19 (31%)	3 (5%)	1 (2%)	3 (5%)
PM10	50	263	72	102	28	21 (21%)	41 (40%)	26 (25%)	7 (7%)	1 (1%)	6 (6%)

Monthly Averages FY 2013			
Particle Size	Standard (ug per m3)	Mean	Compliance
TSP	90	62.4	Yes
PM10	30	46.8	No

		FY 2011	FY 2012	FY 2013
Location	Standard	Annual Average	Annual Average	Annual Average
Residential Depositional Gauges				
Total Insoluble Solids				
Vikings Oval (d)	4 g/m² month	1.4	1.4	1.6*
Church Street (d)	4 g/m² month	3.5	1.5	1.3
Ross Street (d)	4 g/m² month	-	1.6	1.4
Combustible Matter				
Vikings Oval (d)	2 g/m² month	0.8	0.8	0.8*
Church Street (d)	2 g/m² month	0.8	0.6	0.6
Ross Street (d)	2 g/m² month	-	0.8	0.6
Continuous Dust Monitor				
TSP				
Northern (c)	90 ug/m³	32.2	34	62
PM10				
Northern (c)	30 ug/m³	25.8	27	47

Data for FY 2013 (July 2012 and January 2013) has been omitted for the residential depositional gauge at Vikings Oval. The results received were well outside normal values for this location. Subsequent petrographic analysis confirmed that the main constituents of the sample were plant matter and not related to PKCT operations.

Figure 3E Air Quality: Dust Deposition: July 12 to June 13



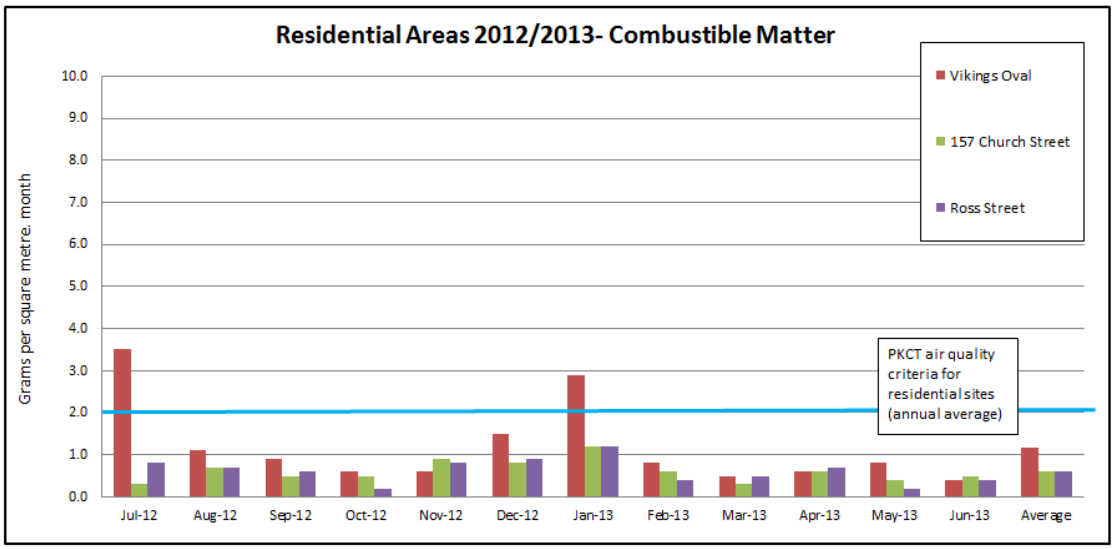


Figure 3E Air Quality: Dust Deposition: July 12 to June 13 (continued)

GAUGE NO.	Analysis g/m^2 month	Financial Year 2012/13												No. samples collected	MIN	MEAN	MAX
		Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13				
P1	Insoluble Solids	3.0	2.6	4.6	3.0	5.0	3.8	5.7	1.9	3.3	7.2	5.8	3.5	12	1.9	4.1	7.2
25m South	Ash	2.0	1.1	2.8	1.8	1.9	1.2	2.2	0.8	1.1	1.7	3.7	2.1	12	0.8	1.9	3.7
No.1	Combustible Matter	1.0	1.5	1.8	1.2	3.1	2.6	3.5	1.1	2.2	5.5	2.1	1.4	12	1.0	2.3	5.5
Coalberth																	
P2	Insoluble Solids	2.7	4.9	5.7	6.0	5.8	3.9	9.6	3.0	3.1	3.9	2.3	7.0	12	2.3	4.8	9.6
40m South of	Ash	1.6	2.3	3.0	4.4	2.7	1.5	4.2	1.5	1.2	2.1	1.1	4.4	12	1.1	2.5	4.4
Southern S/P	Combustible Matter	1.1	2.6	2.7	1.6	3.1	2.4	5.4	1.5	1.9	1.8	1.2	2.6	12	1.1	2.3	5.4
Area																	
P3	Insoluble Solids	10.1	7.1	20.3	8.6	9.8	32.7	18.1	12.8	2.9	8.9	BB	8.9	11	2.9	12.7	32.7
40m East of	Ash	4.7	2.4	10.3	3.2	5.7	16.7	8.1	7.4	1.2	5.2	BB	5.9	11	1.2	6.4	16.7
Southern	Combustible Matter	5.4	4.7	10.0	5.4	4.1	16.0	10.0	5.4	1.7	3.7	BB	3.0	11	1.7	6.3	16.0
S/P Area																	
P4	Insoluble Solids	8.6	24.4	27.9	8.0	13.9	9.1	1.7	3.2	3.7	BB	BB	7.9	10	1.7	10.8	27.9
40m East	Ash	3.0	6.5	7.2	2.3	3.8	4.5	0.4	1.3	1.6	BB	BB	3.3	10	0.4	3.4	7.2
No.2 Coalberth	Combustible Matter	5.6	17.9	20.7	5.7	10.1	4.6	1.3	1.9	2.1	BB	BB	4.6	10	1.3	7.5	20.7
S/P Area																	
P5	Insoluble Solids	5.8	10.6	6.1	8.3	8.2	10.9	8.6	3.8	8.4	5.3	3.8	4.2	12	3.8	7.0	10.9
Northern	Ash	2.6	3.7	2.6	3.1	3.9	3.7	2.2	1.3	3.2	2.3	1.1	2.1	12	1.1	2.7	3.9
Settling	Combustible Matter	3.2	6.9	3.5	5.2	4.3	7.2	6.4	2.5	5.2	3.0	2.7	2.1	12	2.1	4.4	7.2
Pond																	
P6	Insoluble Solids	4.4	5.2	7.4	6.4	7.3	4.0	5.9	7.9	9.8	5.5	6.8	4.0	12	4.0	6.2	9.8
40m West No.2	Ash	1.2	1.5	3.2	2.6	2.5	1.3	0.8	2.3	2.4	1.6	3.0	2.1	12	0.8	2.0	3.2
Coalberth	Combustible Matter	3.2	3.7	4.2	3.8	4.8	2.7	5.1	5.6	7.4	3.9	3.8	1.9	12	1.9	4.2	7.4
S/P Area																	
P7	Insoluble Solids	3.6	2.1	1.5	1.0	6.8	3.2	10.0	0.6	2.9	3.5	16.4	4.2	12	0.6	4.7	16.4
260m West No.2	Ash	2.3	1.3	1.0	0.8	4.5	1.7	6.8	0.1	1.1	2.0	14.4	2.7	12	0.1	3.2	14.4
Coalberth	Combustible Matter	1.3	0.8	0.5	0.2	2.3	1.5	3.2	0.5	1.8	1.5	2.0	1.5	12	0.2	1.4	3.2
S/P Area																	
P8	Insoluble Solids	14.7	24.7	28.6	17.8	12.6	18.9	8.2	5.1	4.7	6.8	31.6	7.3	12	4.7	15.1	31.6
PKCT.	Ash	3.4	5.5	5.7	3.4	3.9	4.0	2.2	1.8	1.1	2.0	6.0	1.9	12	1.1	3.4	6.0
North	Combustible Matter	11.3	19.2	22.9	14.4	8.7	14.9	6.0	3.3	3.6	4.8	25.6	5.4	12	3.3	11.7	25.6
Truckwash																	
P9	Insoluble Solids	2.7	4.5	2.6	0.8	3.1	3.2	4.8	1.3	1.6	3.3	1.8	5.0	12	0.8	2.9	5.0
East Side of	Ash	1.6	2.4	1.3	0.3	1.6	1.2	2.0	0.5	0.7	1.7	0.7	3.2	12	0.3	1.4	3.2
Water Board	Combustible Matter	1.1	2.1	1.3	0.5	1.5	2.0	2.8	0.8	0.9	1.6	1.1	1.8	12	0.5	1.5	2.8
Property																	
P11	Insoluble Solids	6.0	1.8	2.0	1.1	1.1	2.6	9.3	1.9	1.1	1.5	1.9	0.7	12	0.7	2.6	9.3
Vikings Oval	Ash	2.5	0.7	1.1	0.5	0.5	1.1	6.4	1.1	0.6	0.9	1.1	0.3	12	0.3	1.4	6.4
Wollongong	Combustible Matter	3.5	1.1	0.9	0.6	0.6	1.5	2.9	0.8	0.5	0.6	0.8	0.4	12	0.4	1.2	3.5
P12	Insoluble Solids	1.0	1.5	1.7	1.2	2.1	1.5	2.3	1.4	0.5	1.2	1.0	0.9	12	0.5	1.4	2.3
157 Church St	Ash	0.7	0.8	1.2	0.7	1.2	0.7	1.1	0.8	0.2	0.6	0.6	0.4	12	0.2	0.8	1.2
Wollongong	Combustible Matter	0.3	0.7	0.5	0.5	0.9	0.8	1.2	0.6	0.3	0.6	0.4	0.5	12	0.3	0.6	1.2
P13	Insoluble Solids	2.5	3.3	2.3	2.5	2.0	5.4	3.3	4.0	5.3	8.1	4.9	5.4	12	2.0	4.1	8.1
200m North of	Ash	1.8	2.4	1.7	1.9	1.2	2.4	2.0	2.7	3.6	6.1	3.2	3.8	12	1.2	2.7	6.1
A.I.S. RO.RO	Combustible Matter	0.7	0.9	0.6	0.6	0.8	3.0	1.3	1.3	1.7	2.1	1.7	1.6	12	0.6	1.4	3.0
Berth																	
P14	Insoluble Solids	1.7	1.3	1.1	0.2	1.7	1.6	2.5	1.2	1.3	1.6	1.4	1.0	12	0.2	1.4	2.5
Ross Street	Ash	0.9	0.6	0.5	0.0	0.9	0.7	1.3	0.8	0.8	0.9	1.2	0.6	12	0.0	0.8	1.3
Wollongong	Combustible Matter	0.8	0.7	0.6	0.2	0.8	0.9	1.2	0.4	0.5	0.7	0.2	0.4	12	0.2	0.6	1.2
P15	Insoluble Solids	11.2	21.9	14.9	15.6	18.3	10.1	22.4	11.3	14.4	8.8	9.1	7.9	12	7.9	13.8	22.4
North of PKCT	Ash	3.7	6.8	4.0	5.4	5.5	3.4	2.7	3.6	4.6	3.6	3.9	3.1	12	2.7	4.2	6.8
Canteen	Combustible Matter	7.5	15.1	10.9	10.2	12.8	6.7	19.7	7.7	9.8	5.2	5.2	4.8	12	4.8	9.6	19.7
Building																	

With reference to **Figure 3E** above, two samples at Vikings Oval (July 2012 and January 2013) recorded very high results which were inconsistent with other results. Petrographic analysis indicated that this was most likely due to local effects indicated by high levels of insect/ plant remains possibly associated with landscaping and mowing.

With reference to **Figure 3D** above, the annual average for PM10 (i.e. less than 10 microns) exceeded the air quality criteria. Total Suspended Particulate (TSP) was within the air quality criteria. The 24 hour average across the reporting period for TSP and PM10 was within the air quality criteria 83% and 72% of the time respectively.

PKCT was assessed as being a moderate to major contributor (8% of total exceedances) to 24 hour dust concentration exceedances for TSP and PM10 on 4 days and 8 days respectively.

Annual average dust deposition at residential sites was within the assessment criteria.

With regard to the exceedances reported above, air quality criteria pertains to residential areas and PKCT's northern monitor is located midway between PKCT and the residential boundary and, as such, does not necessarily reflect the dust levels experienced in those residential areas.

Attachment B provides an extract from PKCT's air quality consultant (Katestone P/L)'s report on continuous dust and dust deposition data collected across the reporting period. **Attachment D** provides an extract from PKCT's Environment Protection Licence (EPL) 12/13 annual return which includes a commentary on dust results and trends. Section 4.3.6 provides an analysis of results.

3.4 Meteorological Monitoring

3.4.1 Consent Condition

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.

3.4.2 Compliance Statement

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

- Northern continuous dust monitor: 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 **Figure 3F** below.

Figure 3F Weather Monitoring Summary- 2013

Wind Rose – Northern & Southern PKCT Monitoring Site

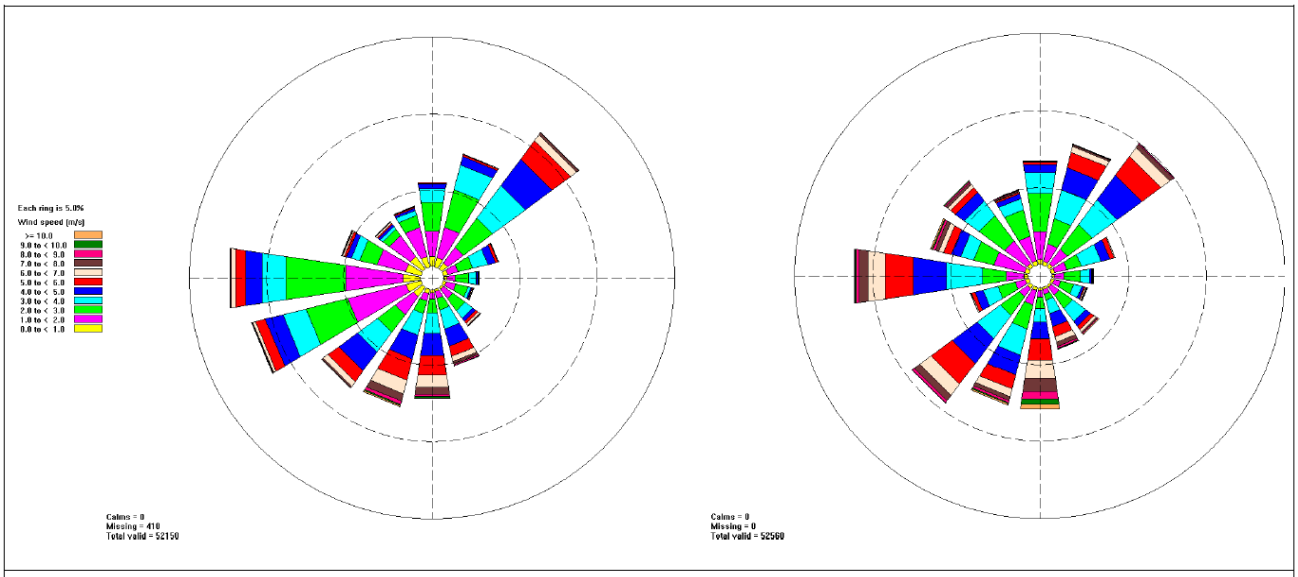


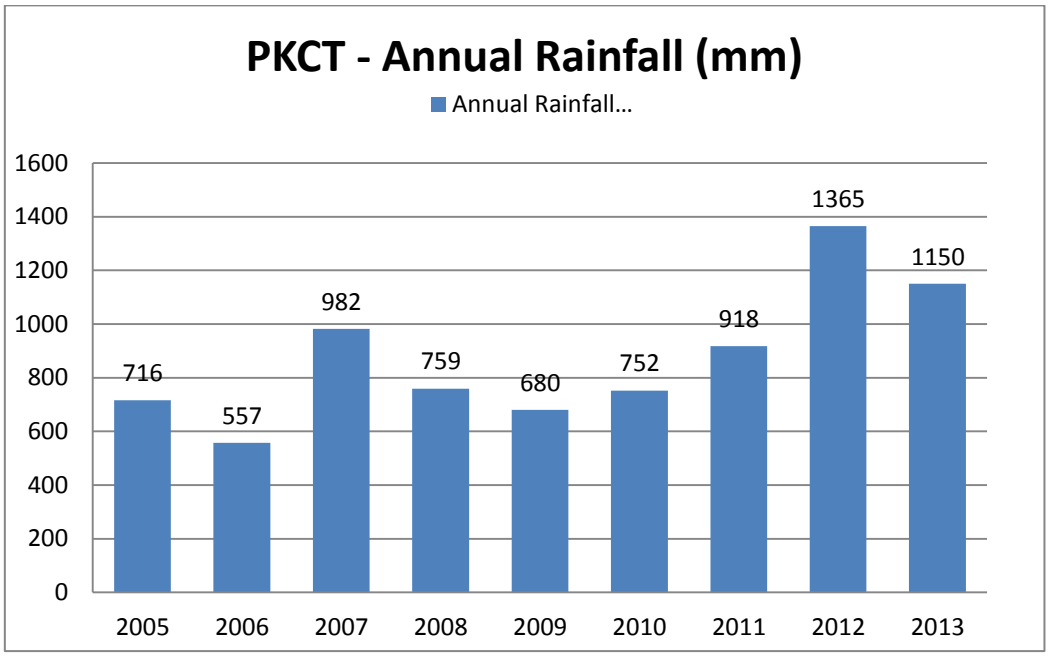
Figure 2 **Annual wind roses for the 10-minute average winds recorded at the PKCT northern (left) and southern (right) monitoring sites during July 2012 to June 2013**

Location: PKCT northern and southern	**Period:** July 2012 – June 2013	**Data source:** PKCT	**Units:** m/s and °
Type: Annual wind rose	52,150 (Northern) and 52,560 (Southern) 10-minute average records	**Prepared by:** Adam Thomas	**Date:** July 2013

Year/month	Rainfall (mm)	Mean Temperature °C	WIND Max. Speed metres/ sec	WIND Average Speed metres/sec
Jul-12	0.9	13.5*	16.8	6.1*
Aug-12	2.2	14.2	25.1	6.0
Sep-12	1.1	16.2	22.3	5.3
Oct-12	22.2	17.1	24.5	5.0
Nov-12	3.7	18.5	19.9	4.9
Dec-12	78.3	20	24.6	5.7
Jan-13	238.7	22.1	26.9	5.3
Feb-13	215.4	21.2	23.3	5.6
Mar-13	61.7	21.7	18.9	5.4
Apr-13	179.2	19.1	22.2	4.2
May-13	154.0	16.6	21.4	4.9
Jun-13	193.0	14.9	18.7	1.76*

*Value calculated with available data. High winds across a significant storm event damaged the site anemometer and some records were lost.

Figure 3F Weather Monitoring Summary- 2013 (continued)



3.5 Surface Water

3.5.1 Consent Condition

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*.

Water Management Plan

13. The Proponent shall prepare and implement a Water Management Plan to the satisfaction of the Director-General. This Plan must:
    (a) be prepared in consultation with DECC;
    (b) be submitted to the Director-General for approval within 12 months of this approval or as otherwise agreed by the Director-General; and
    (c) include:
        - a site water balance, which includes details of sources of water supply, on-site water use and management and off-site water discharges and investigates and describes measures to minimise water use by the project;
        - a sediment control plan for surface works on the site that is consistent with the requirements of the *Managing Urban Stormwater: Soils and Construction Manual* (Landcom 2004, or its latest version);
        - a surface water monitoring program that includes:
            - stormwater effluent discharge criteria;
            - a monitoring protocol for evaluating compliance with the stormwater effluent discharge criteria; and
            - reasonable and feasible mitigation measures to ensure the stormwater effluent discharge criteria are met.

3.5.2 Compliance Statement

PKCT has a Water Management Plan MP.HS.462 (WMP) which is in operation and DP&I approved (refer Section 2.4.2 herein). This Plan was submitted to the DP&I within 12 months of project approval 08_0009.

This Plan outlines the processes operating currently with regard to water monitoring, assessment, reporting, mitigation and management provisions to ensure necessary actions are undertaken in accordance with DP&I approval conditions.

The WMP includes reference to PKCT's Water Savings Action Plan. This Plan has been in place since 2006 and has most recently been revised in June 2012.

Work undertaken during the reporting period and proposed for the next 12 months is outlined in Section 4.3.2 and 4.3.3 respectively. Section 4 also provides an analysis of results and trends.

Figure 3G Water Usage Report

Figure 3G below provides data on potable and recycled water usage.

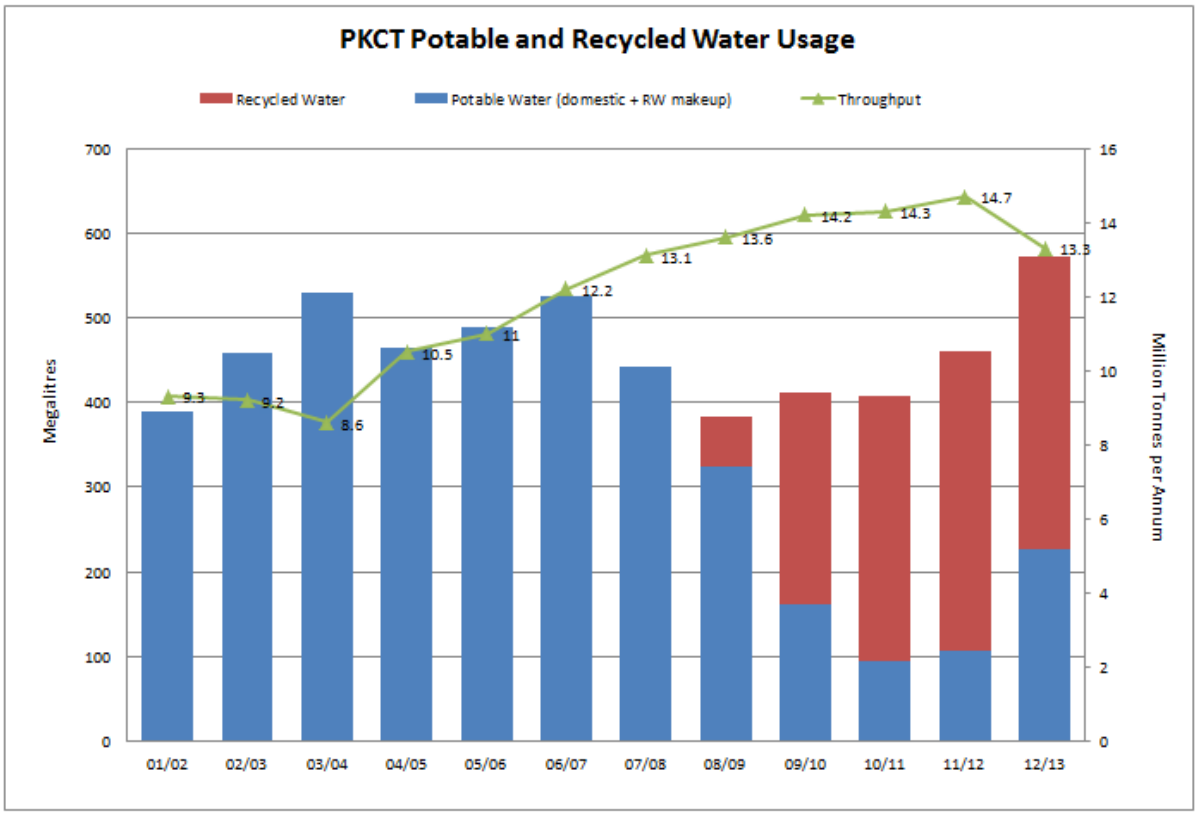


Figure 3G Water Usage Report (continued)

Usage- megalitres	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Total FY13	Total FY12
Recycled water - process	25799	16969	36634	29447	21549	28726	16737	30989	37526	33785	44240	24368	346769	354184
Potable water- process	11479	35247	10749	8817	33730	32322	40240	3800	9086	3378	11218	5361	205428	83813
Potable water- domestic	1803	987	1371	2187	1743	1743	1094	2115	1988	2138	1583	1709	20461	22235
Total	39081	53203	48755	40451	57022	62791	58071	36904	48600	39301	57041	31438	572658	460232
% recycled water/total	69	32	77	77	39	47	29	89	81	91	80	82	63	81
													% Total Usage FY12/FY13	124

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 have been noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009 (refer Section 4.4). Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

3.6 Biodiversity

3.6.1 Consent Condition

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.

3.6.2 Compliance Statement

A Green and Golden Bell Frog Management Plan MP.HS.509 (GGBFMP) is implemented, in operation and DP&I approved (refer Section 2.4.2). The GGBFMP has been developed in consultation with the EPA and PKCT is continuing to work closely with the authority as matters arise.

3.7 Visual Amenity

3.7.1 Consent Condition

Lighting Emissions

15. The Proponent shall:
    (a) ensure no external lights shine above the horizontal;
    (b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version, and
    (c) take all reasonable and feasible measures to mitigate off-site lighting impacts from the project

    to the satisfaction of the Director-General.

Landscape Management Plan

16. The Proponent shall prepare and implement a Landscape Management Plan to the satisfaction of the Director-General. This Plan must:
    (a) be submitted to the Director-General for approval within 12 months of this approval, or as otherwise agreed by the Director-General; and
    (b) include;
        - details of screening trees to be planted on the road receival earth bund and along the northern site boundary; and
        - an implementation program.

3.7.2 Compliance Statement

PKCT is not aware of any off site lighting impacts. Since PKCT commenced operations in 1990, there has been no community complaints made associated with lighting. Should any reports or complaints be received on this topic, PKCT will take immediate action to assess and resolve the matter.

A consultant, Lightpoint Consulting Services, undertook a review of site lighting and an assessment against the standard. A report of 4th October 2011 concluded that PKCT was in compliance with AS 4282 and no evidence of any detrimental impact was found on residential areas.

PKCT's Landscape Management Plan MP.HS.470 (LMP) is in operation and DP&I approved. This document includes details of proposed tree planting. Implementation is staged and processed through PKCT's project approval process. Work undertaken in the reporting period is outlined in Section 4.3.2.

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 were noted and taken into account in the revision of the LMP which was submitted to the DP&I on the 10th August 2011 and DP&I approved on the 27th October 2011. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

3.8 Greenhouse & Energy Efficiency

3.8.1 Consent Condition

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.

3.8.2 Compliance Statement

In accordance with Condition 18, a Greenhouse Gas & Energy Efficiency Management Plan MP.HS.461 (GGEEMP) was included in the 0910 AEMR submission to DP&I. It outlines the monitoring and management processes in place, including PKCT's Energy Savings Action Plan (established under the Energy Administration (Water and Energy Savings) Act 2005) and regulated by OEH).

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 were noted and taken into account in a revision of the GGEEMP which was submitted to the DP&I on the 10th August 2011 as part of the DP&I approval process. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

A status report on actions is provided in **Attachment F**: Independent External Audit Actions Status Report - June 2013 herein.

The GGEEMP is in operation and DP&I approved.

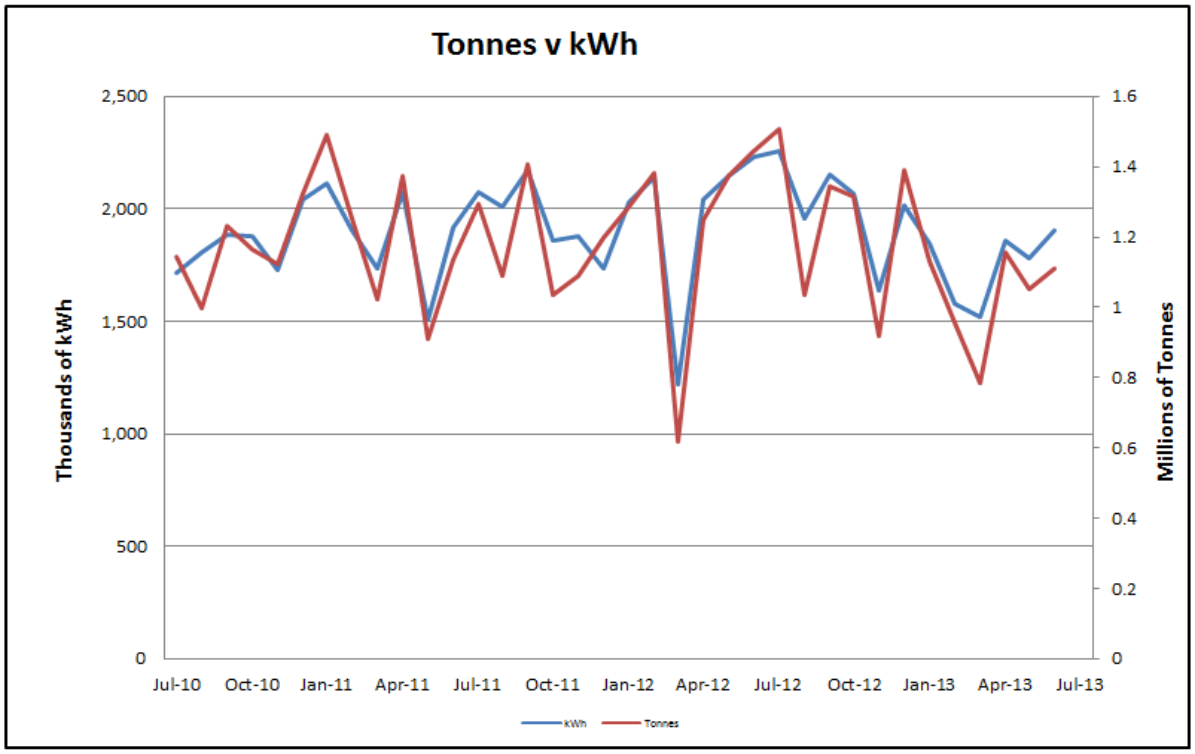
The GGEEMP also includes requirements under the National Greenhouse and Energy Reporting Act 2007 regulated by EPA (federal). In this regard, key actions undertaken in the reporting period are as follows;

- In accordance with legal advice, PKCT, having operational control, is deemed to be the reporting entity under the referenced legislation. Accordingly, PKCT is currently under the reporting threshold.
- A consultant was engaged to advise on applicable site activities and energy aspects and to develop a monitoring format. The format developed has been implemented. Though not reporting at this stage, PKCT is recording data and monitoring energy use and greenhouse gas generation (refer **Figure 3H** & **3I**).
- Work undertaken in the reporting period and proposed for the next reporting period is outlined in Section 4.3.2 and 4.3.3 herein. Commentary on trends and analysis of results is provided Section 4.3.6 and 4.3.8.

Figure 3H Greenhouse Gas Report – 2012/2013

2012/2013 FY (July-June)		A	B	C	D	E
	Reporting unit	Amount consumed (reporting unit)	Energy content (GJ per reporting unit)	Emissions factor (kg CO2-e per GJ)	Gigajoules Reportable energy (GJ)	tonnes Reportable emissions (tonnes CO2-e)
Scope 1 – direct emissions						
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 (Transport)	kL	102	30.88	69.51	3150	219
Petrol (transport)	kL	22	34.20	69.60	752	52
Petroleum based oils	kL	12	38.80	27.90	466	13
Petroleum based greases	kL	6.15	38.80	27.90	239	7
Acetylene	m3 *	67	0.0393	51.33	3	0
Scope 2 – indirect emissions						
	Reporting unit		Energy content (GJ per kWh)	Emissions factor (kg CO2-e per kWh)		
Electricity	kWh	22,116,901	0.0036	0.89	79621	19684
Total					84230	19975
Threshold					100,000	25,000

Figure 3I(i) Energy Usage Report



Neither EPL 1625 nor DP&I Approval 08_0009 specify criteria for GHG emissions or energy reduction. However, it is noted that Greenhouse Gases - Scope 1 and Scope 2 emissions are below the National Greenhouse and Energy Reporting (NGER) scheme reporting threshold. **Figure 3H** and **Figure 3I(i)** above provide data covering the reporting period. Analysis of results and trends is provided in Section 4.3.6 and 4.3.8.

There was a decrease in calculated greenhouse gas emissions (8.3%) comparable to a 9% reduction in activity (tonnes loaded) over the reporting period (compared to the previous reporting period).

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 are noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009 (refer Section 4.4). Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

Figure 3I(ii) Kilowatt Hours per Tonne

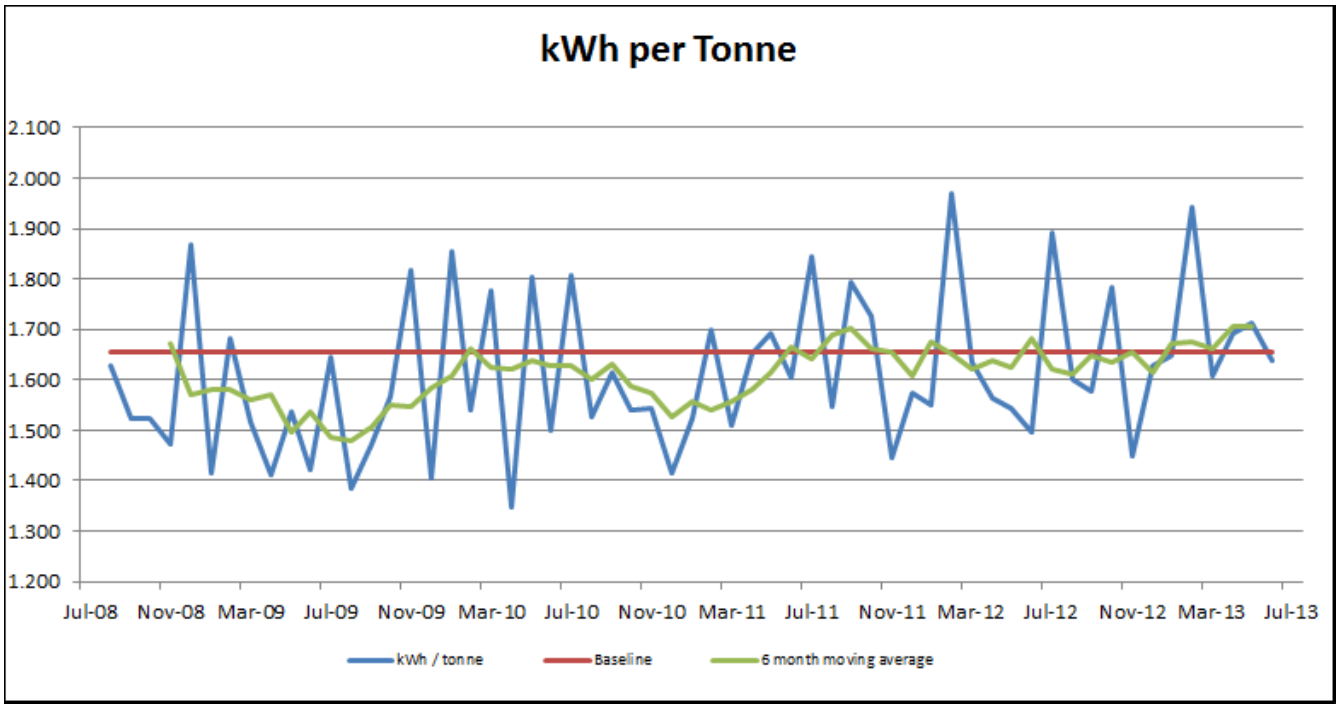


Figure 3I(iii) Year on Year Energy Comparison

	kw hr per tonne	Baseline	Improvement of Baseline
FY10	1.593	1.655	3.8%
FY11	1.594	1.655	3.7%
FY12	1.641	1.655	0.9%
FY13	1.681	1.655	-1.6%

3.9 Waste

3.9.1 Consent Condition

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.

3.9.2 Compliance Statement

PKCT's Waste Management Plan MP.HS.460 (WSMP), submitted to DP&I with 0910 AEMR, is in operation. The WSMP contains waste monitoring, assessment, reporting, and mitigation and management provisions to ensure necessary actions and that waste from PKCT premises comply with the criteria in the condition above.

The objectives of this WSMP are to;

- Identify waste streams from PKCT normal operations.
- Review waste streams to identify opportunities to reduce waste generation.
- Categorise identified waste streams into reuse, recycle, recovery or disposal.
- Provide a framework for managing waste and educating staff to reduce disposal.
- Provide methodology for waste handling to ensure implementation of framework.
- Ensure availability of waste related data for the PKCT AEMR.
- Monitor the success of the WMP and continually improve it based on results.
- Ensure suitable PKCT Managerial review of the waste management process leading to consideration and/or implementation of suitable improvement opportunities.

Figure 3J below reports on the types and quantities of waste generated in the reporting period. The figure shows there are a number of waste streams segregated for general or special disposal or recycling. Waste management activities undertaken in this reporting period and proposed are outlined in Section 4.3.2 and Section 4.3.3 respectively

Figure 3J Waste Report

Waste	Unit	2012 Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Total	Disposal Method
General Waste - Bulk Bins (Roll on)	tonnes	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.06	Landfill
General Waste - Front Lift Bins - Main Carpark/Admin Building/Workshop/Contractors Shed/Road Receival	tonnes	3.72	5.65	3.45	3.91	3.91	3.29	2.37	4.54	3.92	8.57	4.18	3.72	51.24	Landfill
Cardboard Recycling Bin - Admin and Workshop	tonnes	0.00	0.33	0.23	0.25	0.26	0.24	0.14	0.17	0.12	0.17	0.17	0.17	2.24	Recycled
Asbestos - all areas	tonnes	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	Landfill
Copper Wire Bin	tonnes	0.96	Nil	Nil	Nil	1.57	1.04	Nil	Nil	Nil	Nil	Nil	Nil	3.57	Recycled
Waste Steel Removal - all areas	tonnes	16.42	0	17.14	21.86	31.2	Nil	5.86	14.92	14.3	0	13.64	0	135.34	Recycled
Grease Cartridges	litres	Nil	Nil	Nil	Nil	205	Nil	205	Nil	410	Nil	Nil	205	1025.00	Recycled
Oil Filters	litres	Nil	Nil	410	Nil	Nil	Nil	615	Nil	205	Nil	Nil	410	1640.00	Recycled
Oily Rags	litres	Nil	Nil	205	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	205.00	Recycled
Coolant	litres	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	410	Nil	Nil	410.00	Recycled
Oil/Grease	litres	Nil	Nil	205	11480	Nil	Nil	Nil	Nil	205	Nil	Nil	Nil	11890.00	Recycled

Figure 3J Waste Report (Continued)

PROJECT WASTE						
PROJECT	Waste Type	UNIT	Project Total	On Site	Recycled	Landfill
Berth 101 Pile Refurbishment	Concrete	tonnes	10		10	
Berth 102 Pile Refurbishment	Concrete	tonnes	35		35	
Stacker/Reclaimer Long-Travel Rail Repairs	Steel	tonnes	15		15	
NC8 Structural Refurbishment	Concrete Steel	tonnes tonnes	15 5		15 5	
TS4 New Pavement Project	Excavated Spoil	tonnes	2500		2500	
Rail Overhead Powerline Removal	Steel Copper Alloy	tonnes tonnes	5 15		5 15	
Stacker 1,2,4 Structural Repairs & Stair Replacements	Steel	tonnes	10		10	
Seawall Fence Project	Steel Concrete Asphalt	tonnes tonnes tonnes	4 17 12		3.6 17 12	
Removal of redundant pipe stand foundations	Concrete	tonnes	4		4	
Reclaimer NLR	Steel	tonnes	9		9	
Total concrete removed off site	Concrete	tonnes	81			
Total steel removed off site	Steel	tonnes	63			

3.10 Hazards

3.10.1 Consent Condition

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*.

3.10.2 Compliance Statement

PKCT is aware of all dangerous goods onsite and ensures personnel are suitably trained to handle these and that there is suitable site storage in accordance with AS1940 & AS1596.

PKCT currently has two 40,000 litre underground fuel storage tanks which are 30 years old and have held diesel and unleaded petrol for site light vehicles and mobile plant operations. In accordance with regulations groundwater and tank integrity tests have been undertaken in recent years to ensure tanks are secure and not leaking. Actions carried out during the reporting period are as follows;

- Groundwater testing was carried out for the underground fuel tanks in June 2012, December 2012 and February 2013 and the results indicated the tanks were sound with no evidence of leaks.
- In view of the age of the tanks, it was decided that use of the tanks be discontinued and alternate arrangements be implemented.
- A risk assessment was undertaken in January 2013 which was facilitated by a qualified consultant and an action plan was developed and implemented.
- The onsite unleaded facility was replaced by offsite refuelling of light vehicles at commercial service stations. This commenced in May 2013.
- The onsite diesel facility was replaced by a mobile diesel refuelling service. This operation commenced in February 2013. Features of the service provider included the following;
    - Service provider engaged is licenced to carry out the service and servicing other industrial sites locally. Capability was confirmed by PKCT's consultant.
    - The truck mounted diesel storage tank is double skinned with spill response facilities and procedures in place.
    - Service provider would continue to supply B20 soy biodiesel.
    - Service provider is already established on site and familiar with PKCT operations.

- Stocks in the underground tanks were monitored and run low. Arrangements are being made to remove and dispose of residues and decommission the tanks.
- EPA and Workcover were formally notified of actions undertaken in February 2013.
- PKCT's consultant has completed a project scope for a permanent above ground diesel facility. A review of current arrangements will be made in August 2013. Progress will be reported in the next reporting period.
- Eliminating storage of unleaded fuel on site provides a notable safety improvement as it was the most significant dangerous good held on site.

3.11 Fire Control

3.11.1 Consent Condition

21. During the project, the Proponent shall:
    (a) ensure that it maintains suitable equipment to respond to any fires onsite; and
    (b) assist the fire and emergency services as much as possible if there is a fire onsite.
22. The Proponent shall ensure that it maintains a Fire Management Plan for the site.

3.11.2 Compliance Statement

PKCT has a Fire Management Plan MP.HS.459 (FMP) in place which outlines the processes pertaining to fire management associated with PKCT operations.

Actions carried out in this reporting period and proposed relating to fire management are outlined in Section 4.3.2 and Section 4.3.3.

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 are noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009 (refer Section 4.4). Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

4.0 ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

4.1 Environmental Management

Condition 1 of Schedule 4 in the PKCT Major Project Approval 08_0009 contains requirements for environmental management. **Table 4.1** identifies these and explains how PKCT complies.

Table 4.1 – Environmental Management Compliance

Environmental Management (Condition 1, Sch. 4)	Reference/Comment
The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:	Refer to the PKCT Environmental Management Strategy (EMS).
(a) be submitted to the Director-General within 12 months of this project approval or otherwise agreed by the Director-General;	EMS was submitted to DP&I by 31.7.10 as part of 0910 AEMR; also refer Section 9.2 of EMS.
(b) provide for the strategic context for the environmental management of the project;	Refer to Section 5 of the PKCT EMS.
(c) identify the statutory requirements that apply to the project;	Refer to Section 6 of the PKCT EMS.
(d) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the project; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the project; • respond to any non-compliance; • manage cumulative impacts; and • respond to emergencies;	Refer to EMS Sections as follows: 11 11 11.3 7.6 7.3 8.1
(e) include an environmental monitoring program for the project that includes all the monitoring requirements of this approval;	Refer to Section 9 of the PKCT EMS.
(f) describe how the various incident and approval reporting requirements of the project would be integrated into a single reporting system; and	Refer to Section 9 of the PKCT EMS.
(g) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.	Refer to Section 4 of the PKCT EMS.

4.2 Reporting

4.2.1 Consent Condition

Incident Reporting

2. Within 24 hours of detecting the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall notify the Department and other relevant agencies of the incident.

3. Within 21 days of notifying the Department and other relevant agencies of such an incident, the Proponent shall provide the Department and these agencies with a written report that:
   (a) describes the date, time, and nature of the incident;
   (b) identifies the cause (or likely cause) of the incident;
   (c) describes what action has been taken to date; and
   (d) describes the proposed measures to address the incident.

4.2.2 Compliance Statement

Requirements associated with this condition have been referenced in the Environment Management Strategy MP.HS.64 and PKCT's Event Management procedure. There were no reportable incidents in the reporting period.

4.3 Annual Reporting

Condition 4 of Schedule 4 in the PKCT Major Project Approval 08_0009 contains requirements for annual reporting. **Table 4.3** identifies these requirements and explains how PKCT complies.

Table 4.3 – Environmental Management Compliance

AEMR Consent Condition (Condition 4, Schedule 4)	AEMR Section
Within 12 months of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and all relevant agencies. This report must:	N/A
(a) identify the standards and performance measures that apply to project;	4.3.1
(b) describe the works carried out in the last 12 months;	4.3.2
(c) describe the works planned to be carried out in the next 12 months;	4.3.3
(d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;	4.3.4
(e) include a summary of the monitoring results for the project during the past year;	4.3.5
(f) include an analysis of these monitoring results against the relevant: • impact assessment criteria/limits; • monitoring results from previous years; and • predictions in the EA or other documents listed in condition 2 of schedule 2;	4.3.6
(g) identify and discuss all exceedances of approval and licence conditions and other applicable standards and performance measures;	4.3.7
(h) identify any trends in the monitoring results over the life of the project;	4.3.8
(i) identify any non-compliance during the previous year; and	4.3.9
(j) describe what actions were, or are being, taken to ensure compliance.	4.3.10

4.3.1 Environmental Standards & Performance

The environmental standards and performance requirements applicable to PKCT's operations are specified in the Environment Management Strategy and associated management plans.

PKCT's EPL 1625 and DP&I Approval 08_0009 are the primary statutory instruments.

Noise

EPL 1625 & Major Project Approval 08_0009 control noise emissions from PKCT's premises. Noise criteria are outlined in Section 3.1.1.

Air Quality

EPL 1625 contains a requirement for dust monitoring but there are 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 windblown or traffic generated dust.

Major Project Approval 08_0009 does contain air quality criteria which are outlined in Section 3.3.1.

Surface Water

The Protection of the Environment Operation (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; in addition, 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.

DP&I 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.

The Water Management Plan MP.HS.462 references applicable legal and other requirements.

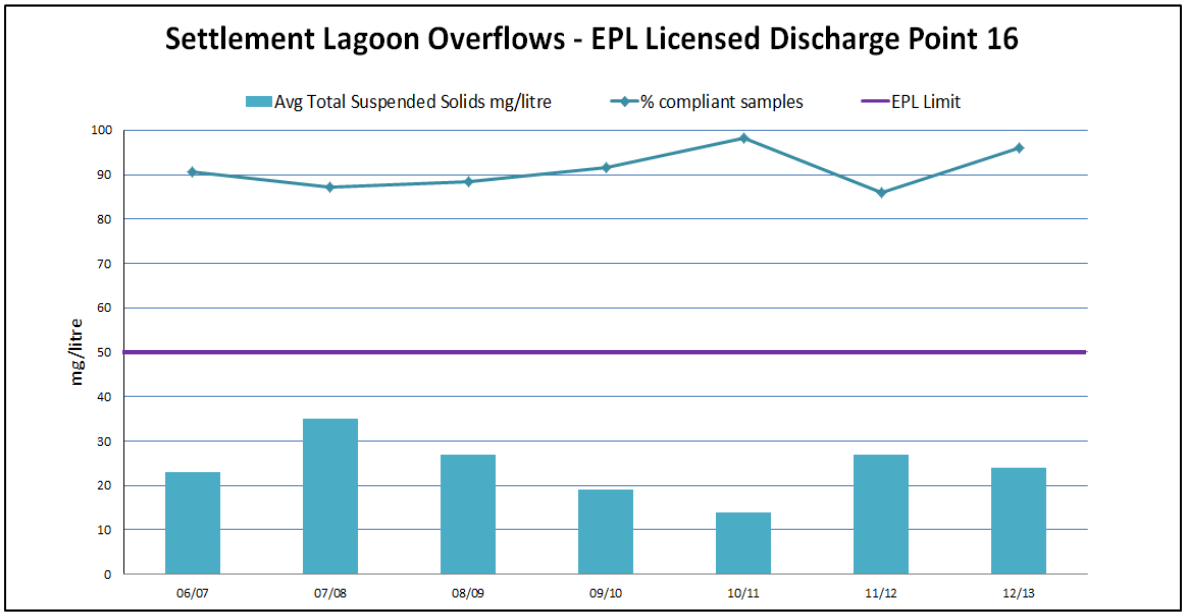
Figure 4A Discharge Point P16 Water Quality- Overflows provides a summary of water quality results from PKCT's EPL licenced discharge point. The results indicate the following;

- 96% compliance for total suspended solids. This is an improvement of 10% on the last reporting period. The improvement is attributed to the Settlement Lagoon dosing unit upgrade. After completion of commissioning in February 2013, 100% compliance has been achieved with excellent total suspended solids results in harbour discharges.
- 100% compliance was achieved for oil/grease across the reporting period.
- 96% compliance was achieved for pH across the reporting period, **Figure 4B**. Since the commencement of recycled water use at PKCT, pH has been found at times to be outside the EPL limits potentially due to the increased nutrient levels and subsequent algal growth in collected water. Management strategies for the pH levels in the water collection system are currently being investigated in consultation with the EPA.

- Consultant advice indicates that periodic discharge, usually during storm conditions, of water with elevated pH doesn't adversely impact on receiving waters. **Figure 4C** provides an indication of the effect of algal counts and water temperature on elevated pH.

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 and Section 5.1 provides further details of circumstances of the exceedances and actions being undertaken. Actions have also been recorded in Sections 4.3.2 and 4.3.3.

Figure 4A Discharge Point P16 Water Quality- Overflows



July12-June13	EPL Limit	unit	Compliant Samples	Total Samples	% Compliance	Average
pH	6.5-9.5*		65	68	96%	not applicable
Total Suspended Solids	<50	mg/litre	65 (62**)	68	96%	24
Oil/grease	<10	mg/litre	68	68	100%	< 5

***pH range extended by EPA to 9.5**

**** A rainfall event over a week in Jan 2013 recorded five TSS values >50mg/l. Two non compliant samples were recorded for the period.**

Figure 4B pH of Overflow Samples

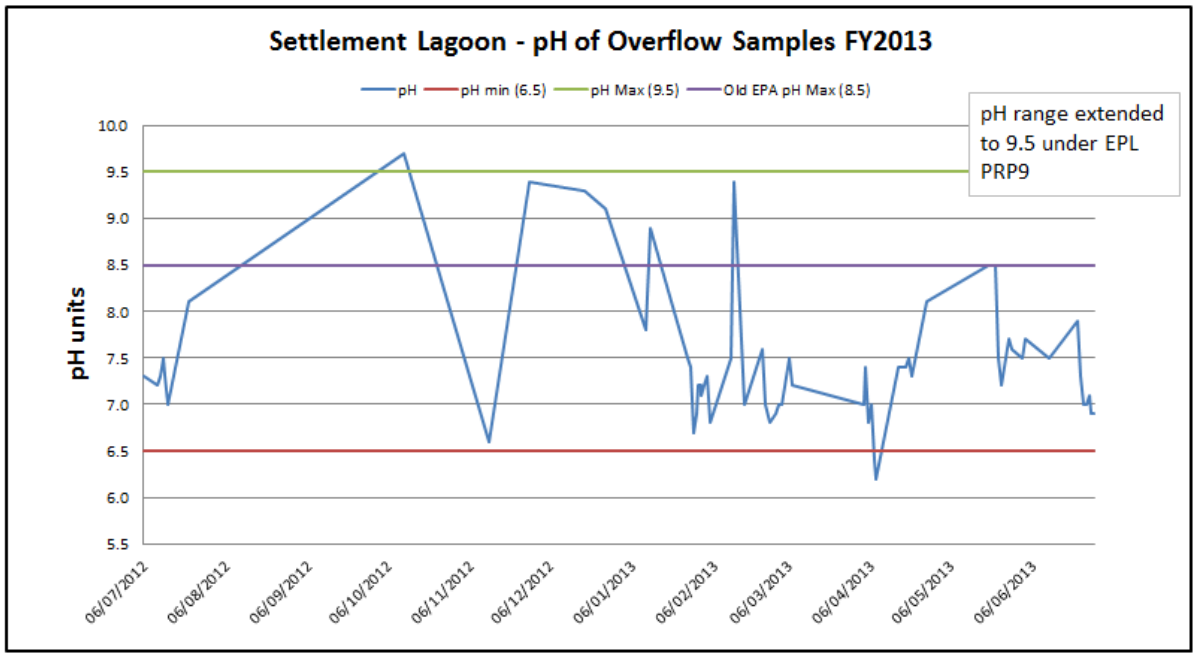
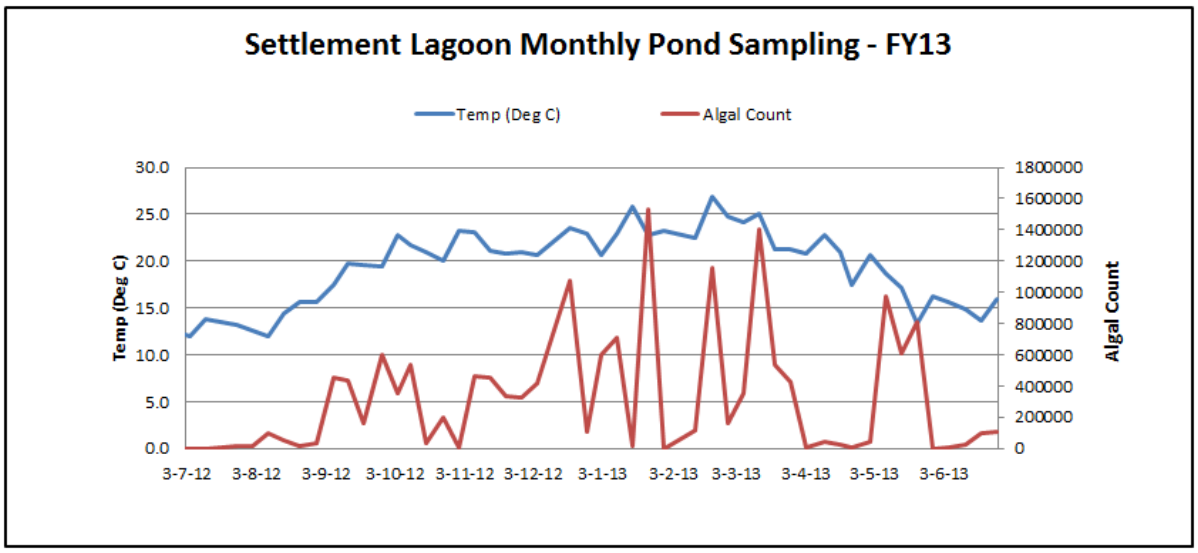


Figure 4C Algal Count



GHG & Energy Use

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.

Include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use at the project.

Greenhouse Gas and Energy Efficiency Management Plan MP.HS.461 references applicable legal and other requirements.

Waste

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.

Implement reasonable and feasible measures to minimise waste generated by the project.

Waste Management Plan MP.HS.460 references applicable legal and other requirements. The waste data in **Figure 3J** illustrates PKCT's efforts in recycling. It also highlights the importance of waste management for major projects which can involve significant quantities.

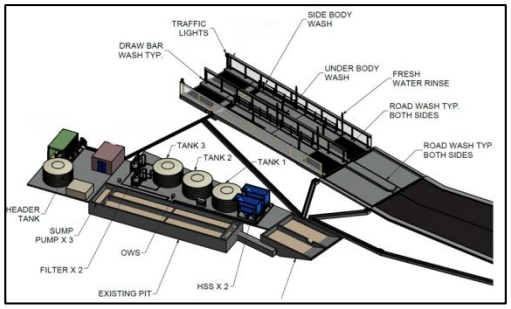
4.3.2 Activities During Reporting Period

NB this section reports on actions referenced in the previous AEMR for this reporting period.

2012/2013 AEMR Actions	
Independent External Audit- March 11	
• Report to DP&I by 10th August 2011 on audit findings recommendations; advise of proposed and completed actions. • Progress implementation of audit actions to completion. N.B many of the actions will pertain to the aspects listed below.	• Report was submitted to the DP&I by PKCT on 10th August 2011 providing a response to the audit findings and recommendations. The report sought clarification on aspects of PKCT's Project Approval conditions and provided advice on proposed actions. • By letter of 27th October 2011, DP&I provided a response to PKCT's report. • **Attachment F** herein provides a status report on actions.
Environmental Monitoring	
• Carry out the required environmental monitoring as outlined in the Environmental Management Strategy MP.HS.464.	Complete- monitoring carried out over period (n.b. MP.HS.464 **Table 9.1**) • Air quality- EPL dust deposition (refer **Figure 3E and Attachment B**) • Air quality- continuous dust monitors (refer **Figure 3D and Attachment B**) • Water discharges- EPL water quality limits (refer **Figure 4A and Attachment D**) • Recycled water- water quality (refer **Figure 3G**) • Recycled water- water usage (refer **Figure 3G**) • Electricity- usage (refer **Figure 3I**) • Greenhouse gas- generation (refer **Figure 3H**) • Noise- DP&I Approval 08_0009 and EPL (refer **Attachment A**) • Activity- shiploading and receivals data (refer **Figure 3B**) • Rainfall- EPL requirement (refer **Attachment D and Figure 3F**) • National pollution inventory report (submitted to EPA on 8th August 2012) • Complaints-(refer **Figure 3B** & **Attachment D**) • Incidents-(refer **Figure 3B and Attachment D**) • Cooling Tower- (refer **Attachment E**)

• As part of strategic planning and project development, carry out baseline and other assessments as required.	Baseline environmental assessments needed for project development have been identified, have commenced and will need to be progressed across forth coming reporting periods. Areas to be addressed are as follows: • Air Quality • Surface Water • Groundwater • Marine Water Quality • Marine Ecology • Site Contamination • Noise • GHG and EE • Traffic and Transport • Biodiversity • Visual • Waste • Community Relations & Stakeholder Communication During the reporting period, market forecasts were reviewed and the timeframe for possible project works extended curtailing further progress of the environmental assessments referenced above. Focus in the immediate term has turned to restoration and compliance projects. In this regard, geotechnical investigation has progressed across site relating to the provision of possible equipment laydown and assembly areas.
Noise	
Continue noise surveys in accordance with the Noise Management Plan MP.HS.387.	• Noise surveys were carried out in September 2012 and March 2013- refer **Attachment A** • A Traffic and Noise study simulation was carried out in August 2011 to assess against EA predictions. Further work across the reporting period indicates that noise simulation aligns with original EA predications. • PKCT's noise consultant carried out a review of meteorological data to ascertain most appropriate months to measure noise and its impacts on adjacent residential areas.
Traffic and Transportation	
Continue to monitor application of Drivers Code of Conduct Implementation Plan MP.BM.453.	• Refer **Figures 3C** and **2A** and Section 3.3.2. With reference to Section 3.1.4 and **Attachment F**, improvements have been implemented to strengthen DCC implementation and this has realised performance improvements with a significant increase in audits/ driver observations while incidents have decreased and complaints have remained stable, **Figure 2A**.

	• By letter of 7th May 2012, PKCT submitted an application to the DP&I seeking approval to receive up to 10 million tonnes by public road in accordance with the provisions of Project Approval 08_0009. Further discussions have been held with EPA and DP&I across the reporting period and a further submission has been made to the DP&I on the 13th June 2013.
Progress the truck wash upgrade to completion and carry out an effectiveness review in accordance with EPL PRP 11- Environment Improvement Program- Install Northern Truck Wash Upgrade.	With reference to Section 6.1.2, north truck wash upgrade project is progressing and scheduled for completion in August 2013. An effectiveness review will then be undertaken to verify improved performance. A Pollution Reduction Program (PRP 11) is in place under PKCT's environment protection licence 1625 to track progress.  New spray pumps at the north truck wash  New water treatment facilities including sand filters
Air Quality	
Further refine the air quality methodology as it is implemented in the Air Quality Management Plan MP.HS.387 giving consideration to the following: • Confirm replacement of the Corrimal St residential site with the Ross Street site as an EPL monitoring site and arrange for a variation to PKCT's EPL. • Develop a project scope and seek approval to	Progress has been made across the reporting period as follows; • Corrimal St residential site has been discontinued. Apart from the site's unsuitability due to its susceptibility to local dust sources, access to the gauge for sampling is no longer being provided by the resident. Residents at the Ross St site (Linkside Apartments) are supportive to the existing site continuing and PKCT is developing a proposal for a permanent dust deposition arrangement. The EPA has been notified. The EPL has not been varied as yet. PKCT's regulatory reporting now excludes Corrimal St and includes data from the Ross St site. • Vikings Football Club has been contacted and a site inspection carried out. The club is supportive of a rationalisation of the current dust monitoring instrumentation and there is no in principle objection to an

install a 3rd continuous dust monitor at the Vikings Oval site on the residential boundary. • Continuing to investigate petrographic and other techniques for differentiating dust sources impacting on residential areas. • Complete evaluation of Katestone's proposal to automate continuous dust data reporting and, if viable, seek project approval to proceed.	additional continuous dust monitor being installed. PKCT has also assessed the site with BlueScope who also has dust monitoring equipment at this site. PKCT's continuous dust monitor service contractor has determined that the location is viable for data transmission back into PKCT's network. Further project scoping and design work is required and will be progressed in the next reporting period. • An alternate, improved petrographic technique to the current approach commercially available has not been found. Benchmarking with other coal terminals has indicated that the CSIRO may be developing a new technology. Enquiries are in progress and will continue across the next reporting period. • This project is on hold due to budgetary constraints across the reporting period. The data is accessible through manual methods. Cost/ benefit of this enhancement will be reviewed across the next reporting period.
Progress PKCT's dust improvement initiatives through the Environmental Improvement Project which forms part of the 2012/13 Business Plan. Develop projects through the project approval process with consideration to the following; • Installation of a second moisture meter on the road stream to progress implementation of the dust extinction moisture management strategy. • Collect moisture data from rail receival moisture meter and review water application rates at conveyor transfer points and evaluate spray adequacy. • Continue to collect coal and bulk product data from shippers as required to determine material handling properties such as dust extinction moisture and dustiness. • Progress the north truck wash upgrade project as described above. • Pave the northern transfer station area (currently unsealed) and a potential source of fugitive dust emissions.	Dust Management Improvement project progressed as part of the 2012/13 Business Plan as follows; • A moisture analyser is installed on the rail receival system to determine the moisture level in coal received at the PKCT. This data is essential as part of Dust Extinction Moisture management to ensure that coal is at its optimum moisture level to prevent/ minimise lift off. The unit is commissioned and data is being collected. Evaluation is yet to be done on the data collected. Evaluation of the data will be progressed across the next reporting period. • The North Truckwash Upgrade project has been approved and in progress. This will provide a significant reduction in dust associated with traffic on exit roads. Project is scheduled for completion in August 2013.  Upgrade schematic • A project to asphaltic pave the northern transfer station area was completed during this reporting period. The images below show the asphalted area and the significant reduction in dust across the area. This area is close to the perimeter roadway and in close proximity to the Wollongong Golf Course.

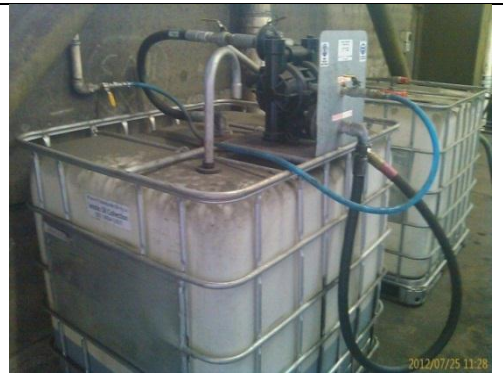
	 Area pre asphalting  Area post asphalting
• Continue to participate in Port User Group investigating dust fallout from the industrial precinct and liaise with car industry neighbours.	• Across the reporting period, the group, chaired by the Port Kembla Port Corporation hasn't met. There have been no complaints or contacts from nearby industry across the reporting period.
Surface Water	
Progress actions under EPA EPL Pollution Reduction Program PRP9- Performance Upgrades to the Stormwater Pollution Control System, the key aspects of which are as follows; • Continue to monitor pH and algae levels. • Progress trial of algae controls identified in the Cardno Report completed under PRP 9 and assesses results. • Continue to liaise with the EPA and seek to retain the extended pH range of 6.5- 9.5 for EPL purposes until appropriate and effective	• **Attachment D** provides a status report on action undertaken under PRP 9 across the EPL annual return period (April 2011-March 2012). PKCT submitted a report to the EPA by 30.6.12 (in accordance with the PRP). This report was carried out by PKCT's consultant Cardno and consists of (a) a report on algae control options (b) a report on PKCT's water collections and recommendations for improvement taking a treatment train approach. Discussions with the EPA are progressing and further work will be required across the next reporting period. In the interim, PKCT proposed improvement actions are being progressed. • As part of PRP 9, the settlement lagoon dosing unit has been upgraded including a backup dosing unit to ensure the system is available and operational when required. The upgrade also includes a new polymer tank with level monitoring and alarming.

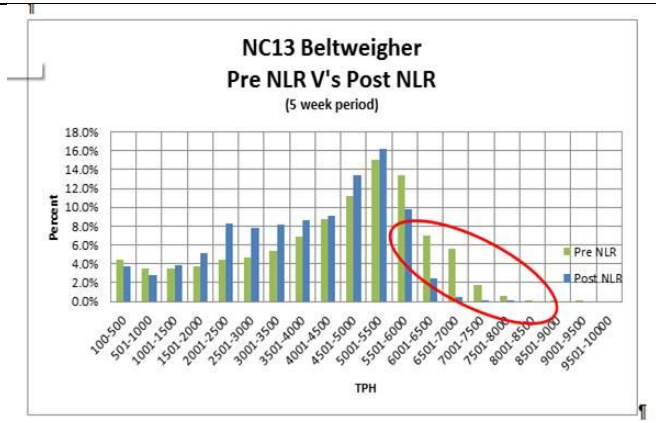
algae controls are identified and fully implemented. • Develop projects scope for water collection pond improvements in accordance with the Cardno Report completed under PRP 9. • Investigate improvements in stockyard and spillage management to reduce the sediment load on collection ponds.	 Back up dosing unit  New polymer storage tank
Progress further potable water savings through PKCT's Water Savings Action Plan and submit an annual Water Savings Action Plan status report in June 2012.	• As part of June 2012 Water Savings Action Plan, ship bunkering meters have been installed which draw on PKCT's domestic supply. This has been done for both the BP Berth 101 and Coal berth 102 and will assist in tracking usage patterns. Domestic consumption has increased in recent years due to increasing numbers of project and contract personnel associated with restoration and improvement works.  
Implement actions identified by consultant, Water Futures, in its review of the implementation of the Recycled Water Project.	• Scope for the Truckwash Upgrade has included reducing operating pressures and lowering sprays to reduce spray drift and overspray. Additional water treatment processes have been included to improve the water quality. This may preclude the need for a manual cleaning station.

Biodiversity	
As part of the Greenhouse Park stakeholders group, develop a management plan for the Garungaty Waterway and Greenhouse Park and participate in its implementation.	• Wollongong City Council has developed a draft management plan for Greenhouse Park and surrounds. Over the reporting period, work has progressed at Greenhouse Park and the Garungaty Waterway adjacent to PKCT's premises. This has been facilitated by the EPA. Port Kembla Port Corporation has undertaken significant works entailing weed control, embankment stabilisation, planting and installation of a frog movement corridor fence. PKCT is part of the current stakeholder group and working with Council on reed control activities adjacent to the Greenhouse Park frog ponds.  Greenhouse Park- Water tank and new frog ponds  Improvement works adjacent to Garungaty Waterway
Carry out spring surveys onsite and at the Greenhouse Park habitat to monitor frog activity.	There have been no Green and Golden Bell Frog sightings at PKCT or at Greenhouse Park across the reporting period. There have been some Peron Tree frog sightings (not endangered). PKCT undertakes on site, internal surveys across the spring/ summer period and site personnel are aware to report any frog sightings. A joint EPA/ PKCT night survey was carried out in February 2013. One Peron Tree frog was sighted.

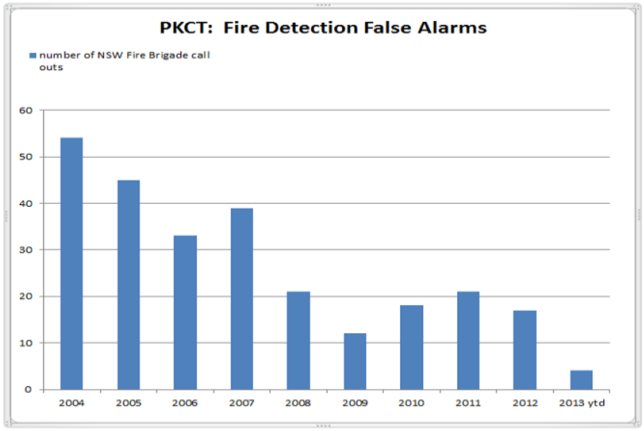
Visual Amenity/Landscaping	
Progress landscaping improvements by Identifying on site and off set opportunities as major restoration and upgrade projects are developed.	• Strategic planning is progressing associated with PKCT operations with consideration to restoration and improvement works. Significant projects are under consideration with possible impacts across the site. Stage 3 Landscaping works is in an area which may require significant earthworks under an upgrade scenario and is currently "on hold". • Significant paving works were carried out in the northern transfer station area across the reporting period. Further to providing dust control improvement, the work enhances adjacent landscaping areas.  Landscaped area in background  Progression of landscaped area
Give consideration to requirements under the standard and Lightpoint Consulting Services findings in project development and plan restoration and upgrade projects to ensure there are no adverse lighting impacts on residential areas.	Reference to these obligations is made in PKCT's project documentation to ensure it is taken into account in project scoping and development. Site personnel are also made aware of this requirement in project implementation and undertaking operational activities. No issues arose relating to this provision across the reporting period.
Greenhouse Gas and Energy Efficiency	
Progress energy savings through PKCT's Energy Savings Action Plan as follows; • Continue to consider energy savings and greenhouse gas reduction opportunities when developing improvement and remedial	• PKCT's project development process includes the consideration of energy savings and greenhouse gas reductions. PKCT's contractor requirements for working on site also make reference to these obligations. Energy efficiency opportunities were considered in the Northern Truckwash upgrade project. Project inclusions, in particular variable speed spray pumps, will realise projected energy savings of 35% compared against the current

projects. • Consider energy saving opportunities in the project scope for the (a) Administration Building refurbishment/air conditioning upgrade (b) the Project Office construction and implement where reasonably feasible and practical to do so. • Investigate the viability of using B20 biofuels for truck operations and B100 for portable onsite generators and pumps. As part of PKCT strategic planning which is giving consideration to growth options and plant upgrades, undertake a Greenhouse Gas and Energy Savings Review.	facility and will also provide a significant improvement in washing performance and spray water quality. Energy efficiency forms part of procurement considerations in project work in progress for a replacement stacker. This is a significant project. PKCT's project team has benchmarked best practice particularly across other Australian coal terminals to ensure current technologies are identified. • The Administration Building refurbishment project remains in the program but is yet to commence. • Project Office construction is complete. Roof runoff is collected and recycled, walls are insulated, and motion sensors activate and deactivate lighting at certain times and turn off after hours. The car park captures surface runoff and directs back into the site's water collection system.  • The use of soya biodiesel continues for diesel powered mobile equipment on site. The transition to this fuel has been a success with no adverse mechanical impacts observed. Portable equipment covered by PKCT's site refuelling arrangements also now use B20.
Continue to check operations and greenhouse gas emissions versus the threshold for reporting to the OEH.	Monitoring has continued across the reporting period and PKCT remains below the reporting threshold.
Investigate and identify actions and arrangements which will need to be put in place if the threshold is reached.	No further work has been undertaken on this at this stage.
Waste	
Continue the staged review and implementation of waste improvements identified in Transpacific's review of PKCT's waste management.	Oil transfer equipment installed to improve waste oil collection associated with site lubrication and front end loader activities and the decanting of lubricants from storage containers has continued to be utilised across the reporting period. This has assisted in the recycling of waste oils, reduced spills associated with oil handling and reduced manual handling exposures.

	  Combustible liquids store transfer pumps Waste oil containers and pump transfers PKCT has implemented an organisational restructure across the reporting period including employment of a Stores Controller. Improvements in general housekeeping and waste management are being implemented including a 5S program. This has realised waste management benefits which will continue across the next reporting period.
Monitor waste data, evaluate trends and the adequacy of current data capture.	A review of contractual arrangements covering site facilities and waste service has resulted in new arrangements being put in place which will improve waste monitoring, reporting and services. These improvements will be realised across the next reporting period.
Complete coal spillage screening projects and return to coal shipper for dispatch.	28,764 tonnes of spillage coal (September 2012- 12,444 tonnes; January 2013- 16,270 tonnes) was returned to customers as part of spillage screening and recycling activities undertaken during the reporting period.
Continue spillage reduction review.	The Net Loading Rate Project was successfully completed for PKCT's two reclaimers. The purpose of the project was to reduce surges above 6,000 tonnes per hour on ship loading conveyor belts. Surges cause sampling problems and result in spillage and chute blockages.

	 Reduction in values above 6000 tph over sampler belt weigher (12.6% to 3%) Spillage reduction review has identified some key projects which have been developed and are progressing through the project evaluation and the project approval process. The most notable projects offering significant environmental improvements are as follows; • Shiploader 2 spillage reduction • Conveyor NC14 belt wash station • Road Receival system- modification to chutes at transfers incl. Stackers 2 & 4. • Rail Receival system- modification to chutes at transfers incl. Stackers 1. Project to replace a stacker under PKCT's Restoration and Compliance program is in development. This and other projects referenced herein require project approval.
Continue onsite operations and projects applying waste minimisation and recycling principles.	Projects progressed through the reporting involving significant waste quantities include Conveyor NC8 Conveyor Supports Refurbishment Project.
Fire control improvements	
Progress the fire panel communications project to increase the operator's ability to monitor the fire system and undertake system isolations.	Fire sub panel communications upgrade and graphics interface installation is complete providing improved fire system monitoring, management of fire system isolations and event history logging. The project has provided a significant reduction in nuisance false alarms and positive feedback has been received from users.

NSW FIRE BRIGADE- Display screen, fire panel, site plan



Graph illustrating the reduction in false fire alarms

Complete the approved project scope (design/ development) and progress the northern substation fire system upgrade through PKCT's project evaluation and approval process.	This project has progressed. Project approval has not yet been obtained.
Dangerous Goods	
Finalise the new Environmental Protection Plan developed by consultant, GHD, during the reporting periods and carry out recommended actions associated with PKCT's underground storage tanks. Further consider the findings of consultant, Advitech, from the firm's review of site's dangerous goods storage against applicable legal standards and associated guidelines and implement actions as appropriate.	Across previous reporting periods, consultant GHD, has undertaken three studies (a) Targeted Contamination Assessment of Refuelling Area and Waste Tank January 2011 (b) work associated with the development of an Environment Protection Plan - June 2011 (c) investigation to consider the future of the underground tanks and options to enable PKCT to be fully complaint with the regulations. With reference to Section 3.10.2, PKCT has now discontinued use of its two underground fuel tanks (diesel, unleaded). The diesel facility has been replaced with a mobile refuelling facility. Unleaded fuel for light vehicles is now sourced off site at service stations. A project for a permanent on site diesel storage facility has been scoped though currently not approved. Stocks in the underground tanks have been run down and arrangements are currently being made for the disposal of residues together with decommissioning of the tanks.

On site mobile diesel refuelling service

Oxygen/ Acetylene storage facility previously located on the northern side of the store has been replaced with new, fully compliant facilities located in the workshop quadrangle with oxygen and acetylene cylinders stored separately.

EPL Administration	
Continue to administer the EPL, complete annual return, progress pollution reduction programs.	EPL Annual Return was forwarded to the EPA on the 29th May 2012 (n.b. extract in **Attachment D**). **Attachment D** provides a summary of actions taken across the annual return reporting period (April 2012- March 2013).
Complete implementation of actions required under the new Protection of the Environment Legislation Amendment Act 2011 (a) reporting incidents (b) having Pollution Incident Response Management Plans (c) publishing EPL monitoring data to PKCT's web site.	Changes to environment protection legislation as a result of the Protection of the Environment Legislation Amendment Act 2011 (Amendment Act) came into effect on 6th November 2011. New requirements on EPL holders pertain to (a) incident reporting (b) Pollution Incident Response Plans (c) publishing monitoring data. With reference to Section 5.2 herein, PKCT has implemented the necessary actions and is compliant.
Community Relations	
Continue Consultative Committee actions.	• PKCT Community Consultative Committee is in operation. Meetings were held on the 25th July 2012, 28th November 2012 and 27th March 2013. • The Community Hotline and PKCT website are operational.

4.3.3 Activities Proposed for the Next Reporting Period

2013/2014 AEMR Actions
Independent External Audit- March 11
• **Attachment F** provides a status report on actions being undertaken in response to audit findings and recommendations. • Progress implementation of audit actions to completion. N.B many of the actions will pertain to the aspects listed below. • Undertake the next Independent External Audit scheduled for March 2014.
Environmental Monitoring
Carry out the required environmental monitoring as outlined in the Environmental Management Strategy MP.HS.464.
Review predications made in the EA undertaken as part of Project Approval 08_0009 against data records since approval was obtained for Air Quality and Greenhouse Gas and Energy Efficiency and report in the 2012/13 AEMR.
Noise
Continue noise surveys in accordance with the Noise Management Plan MP.HS.387.
Traffic and Transportation
Continue to monitor application of Drivers Code of Conduct Implementation Plan MP.BM.453. Subject to DPI concurrence, engage a suitably qualified external consultant and undertake an audit to assess the effectiveness of Drivers Code of Conduct Implementation.
Progress the truck wash upgrade to completion and carry out an effectiveness review in accordance with EPL PRP 11- Environment Improvement Program- Install Northern Truck Wash Upgrades.
Air Quality
Further refine the air quality methodology as it is implemented in the Air Quality Management Plan MP.HS.387 giving consideration to the following; • Establish a permanent dust deposition station at Ross St and arrange for a variation to PKCT's EPL. • Further progress development of a project scope and seek approval to install a 3rd continuous dust monitor at the Vikings Oval site on the residential boundary. • Continuing to investigate petrographic and other techniques for differentiating dust sources impacting on residential areas. • Complete evaluation of Katestone's proposal to automate continuous dust data reporting and, if viable, seek project approval to proceed.

Progress PKCT's dust improvement initiatives through the Environmental Improvement Project which forms part of the 2013/14 Business Plan. Develop projects through the project approval process with consideration to the following; • Review priority of progressing implementation of the dust extinction moisture management strategy against alternate environmental improvement projects. • Collect moisture data from rail receival moisture meter and review water application rates at conveyor transfer points and evaluate spray adequacy. • Review site operational controls to identify improvements with considerations to include (a) continuous dust data/ alarming (b) high reliance on visual site assessment by main control room and the implications at night time. • In accordance with PRP 11, carry out an effectiveness review of the north truck wash upgrade project. • Investigate undertaking further trials of agglomerating chemicals to assess benefits in improving dust controls on unsealed areas. • Review continuous dust monitor instrumentation, check calibration arrangements and consider data generated and the influence of the various dust sources particularly across rain fall events.
Continue to participate in Port User Group as required investigating dust fallout from the industrial precinct and liaise with neighbours.
Surface Water
Finalise the draft pollution reduction program with the EPA and implement actions. Actions to include the following; • Continue to monitor pH and algae levels. • Progress trial of algae controls identified in the Cardno Report or those identified subsequently and assesses results. • Continue to liaise with the EPA and seek to retain the extended pH range of 6.5- 9.5 for EPL purposes until appropriate and effective algae controls are identified and fully implemented. • Develop project scope for water collection pond improvements in accordance with the Cardno Report completed under PRP 9 or alternate measures identified subsequently. • Investigate improvements in stockyard and spillage management to reduce the sediment load on collection ponds.
Further progress potable water savings through PKCT's Water Savings Action Plan and include the following actions; • Review Stockpile spray operational controls with consideration to spray selection during light winds and at night time. • Monitor domestic potable usage with reference to the new ship bunker meters and ascertain trends.
Further implement actions identified by consultant, Water Futures, in its review of the implementation of the Recycled Water Project.

Biodiversity
As part of the Greenhouse Park stakeholders group, participate in the implementation of Wollongong City Council's Management Plan for the Garungaty Waterway and Greenhouse Park.
Carry out surveys across the spring-summer-autumn period onsite and at the Greenhouse Park habitat to monitor frog activity.
Visual Amenity/Landscaping
Further progress landscaping improvements by identifying on site / off set opportunities as major restoration works develop.
Give consideration to requirements under the standard and Lightpoint Consulting Services findings in project development and plan restoration and improvement projects to ensure there are no adverse lighting impacts on residential areas.
Greenhouse Gas and Energy Efficiency
Progress energy savings through PKCT's Energy Savings Action Plan. Actions to include the following; • Continue to consider energy savings and greenhouse gas reduction opportunities when developing improvement and remedial projects. • Continue to investigate material handling streams i.e. rail, road and shiploading and associated energy usage under a range of operating conditions to determine optimal conditions and identify energy efficiency opportunities.
Continue to ensure restoration and improvement project development includes due consideration to energy efficiency opportunities with reference to reasonably practical best practice measure and technology available.
Continue to check operations and greenhouse gas emissions versus the threshold for reporting to the Environment Protection Authority.
Investigate and identify actions and arrangements which will need to be put in place if the threshold is reached.
Waste
Continue the staged review and implementation of waste improvements identified in Transpacific's review of PKCT's waste management.
Monitor waste data, evaluate trends and the adequacy of current data capture.
Improve site housekeeping standards through initiatives such as the implementation of the 5S program.
Improve waste data capture and reporting.
Carry out coal spillage screening projects and return to coal shipper for dispatch.
Investigate options for recycling used conveyor belt which has accumulated on site.

Ensure spillage reduction opportunities are considered in project development of restoration and improvement works. The timeframe and priority of such projects is to be determined in the context of overall business needs and will require project approval to proceed. Identified spillage reduction projects include the following;

- Shiploader 2 spillage reduction
- Conveyor NC14 belt wash station
- Road Receival system- modification to chutes at transfers incl. Stackers 2 & 4.
- Rail Receival system- modification to chutes at transfers incl. Stackers 1.

Fire control improvements

- Further progress the northern substation fire system upgrade project through PKCT's project evaluation and approval process.

Dangerous Goods

- Review suitability of continuing the interim arrangements implemented to replace on site underground diesel and unleaded fuel tanks.
- Decommission underground fuel tanks in accordance with applicable regulations.
- Revise the Environmental Protection Plan to reflect new arrangements.

EPL Administration

- Continue to administer the EPL, complete annual return, progress pollution reduction programs.
- Continue implemented actions required under the Protection of the Environment Legislation Amendment Act 2011 (a) reporting incidents (b) having Pollution Incident Response Management Plans (c) publishing EPL monitoring data to PKCT's web site.

Community Relations

- Continue to undertake regular meetings and progress associated Community Consultative Committee actions.
- Continue operation of PKCT's website and Community Hotline.

4.3.4 Summary of Complaints

Complaints received during the reporting period entail the following;

(a) Three community complaints were logged in PKCT's Event Management System during to 2012/2013 reporting period. Refer to Section 6.5 for details.
(b) Complaints to road transport providers are outlined in **Figure 3B** Road Transport Complaints & Incidents Summary and Tonnes – 2012/2013.

4.3.5 Summary of Monitoring Results

This section references data in response to consent condition 4(e) in Schedule 4 of 08_0009 Major Project Approval.

Summary of monitoring data is provided in the Figures and Attachments referenced below. Table of Contents provides a list and page references. A list cross referencing various environmental aspects with results is provided as follows;

- Noise - refer **Attachment A**: Noise Survey- September 12- February 13: Summary of Results–
- Coal & Bulk Products Road Transport
    - Refer **Figure 3A** Summary of PKCT Throughput and Receivals – 2012/2013,
    - Refer **Figure 3B** Road Transport Complaints & Incidents Summary and Tonnes – 2012/2013 and **Figure 2A** Road Transport Report- 2012/2013
- Air Quality –
    - Refer **Figure 3D** Air Quality: Continuous Dust Data
    - Refer **Figure 3E** Air Quality: Dust Deposition: July 12 – June 13
    - Refer **Attachment B:** Extract from Katestone Air Quality AEMR July 2012- June 2013
- Meteorological Monitoring - refer Section 3.4
- Surface Water- refer Section 3.5
    - Refer **Figure 4A** Discharge Point P16 Water Quality- Overflows s
    - Refer **Figure 4B** pH of Overflow Samples
    - Refer **Figure 4C** Algal Count
    - Refer **Attachment C:** EPL Licenced Discharge Point P16- Overflow Results
- Biodiversity (GGBF) - refer Section 3.6.
- GHG & Energy Efficiency –
    - Refer **Figure 3H** Greenhouse Gas Report – 2012/2013

- **Figure 3I(i)** Energy Usage Report
- Waste - refer **Figure 3J** Waste Report
- Water Savings - refer **Figure 3G** Water Usage Report

4.3.6 Analysis of Results

Noise

With reference to Attachment A, noise surveys determined that PKCT noise levels at PKCT's three monitoring sites were within the noise criteria in EPL 1625 and DP&I Approval 08_0009. As these criteria are taken from predictions in the Environmental Assessment (EA) for Major Project 08_0009, PKCT noise emissions were in accordance with predictions in the EA.

No noise complaints were received across the reporting period.

Coal & Bulk Products

PKCT did not receive more than 7.5 million tonnes of coal and bulk products by public road during the reporting period. This accords with approval thresholds in Major Project Approval 08_0009 and the EA. EPL 1625 has no criteria for product receival.

Air Quality

With reference to Section 3.3 and **Figure 3D** Air Quality: Continuous Dust Data and **Figure 3E** Air Quality: Dust Deposition: July 12 – June 13, comparison of air quality measures at residential sites against the air quality criteria in the DP&I Approval 08_0009 indicated the following;

(a) Continuous dust

- Annual average for TSP was within the air quality criteria.
- Annual average for PM10 was outside the air quality criteria.
- 24 hour average exceedances occurred for both PM10 and TSP. PKCT's contribution was generally assessed from no to minor contribution though there was a notable increase in exceedances in comparison to the previous reporting period.

(b) Dust deposition-

- Annual average dust deposition at residential sites was within the air quality criteria.

With regard to 24 hour TSP and PM10 exceedances, 62 and 102 exceedances were recorded respectively which is a significant increase on previous reporting periods. PKCT's contribution has been assessed and is summarised as follows;

(a) No to minor contribution to TSP and PM10 exceedances- 58 (94%), 94 (92%)
(b) Moderate to major contribution to TSP and PM10 exceedances- 4 (6%), 8 (8%)

This illustrates again that PKCT is generally a minor contributor forming part of a large port and the industrial precinct and one of a number of dust sources that may impact on residential areas in PKCT's vicinity. Continuous dust analysis by Katestone P/L, PKCT's air quality consultant, includes assessment of data from BlueScope's high volume sampler at the Vikings Oval site on the residential boundary closest to PKCT and the EPA's residential dust monitors located in the Wollongong district. Broadly, with regard to particulate dust levels the following is concluded;

- Levels are higher in proximity to Wollongong's industrial/ port precinct.
- Levels/ exceedances recorded and reported at PKCT's northern dust monitor site, located halfway between PKCT and the adjacent residential area, would likely be higher than that actually experienced in the residential area itself.
- It is noted on occasion high readings were recorded during or post rain events highlighting the influence of other particulates. This is particularly important for the March rain event as the 2nd, 3rd and 4th March 2013 recorded exceedances with PKCT rated as a moderate to major contributor. To illustrate, reference is made to the following;
    - 28th January 2013- 55mm rain; 24 hr TSP 237 micrograms per cubic metre
    - 29th January 2013- 50 mm rain; 24 hr TSP 184 micrograms per cubic metre
    - 1st February 2013- 64 mm rain; 24 hr TSP 92 micrograms per cubic metre
    - 28th February 2013- 35 mm rain; 24 hr PM10 180 micrograms per cubic metre
    - 1st March 2013- 40 mm rain; no data
    - 2nd March 2013- 13 mm rain; 24 hr TSP 69 micrograms per cubic metre
    - 3rd March 2013- 0 mm rain; 24 hr TSP 121 micrograms per cubic metre
    - 3rd March 2013- 0 mm rain; 24 hr TSP 117 micrograms per cubic metre
- The value of a third continuous monitor on the residential boundary has been noted in previous AEMR reports and is included as an action in Section 4.3.3 herein.
- In view of the above, a review of the continuous dust monitor functionality and wet weather influences on particulate measurement is proposed and is included as an action in Section 4.3.3 herein.

It is considered that weather conditions across the reporting period contributed to the adverse trend in particulate dust emissions as follows;

- July 2012 to December 2013- very dry and windy. Of the 120 mm of rain which fell across the 6 months, 110 mm fell over three days.
- January to June 2013- half of the total rainfall across the reporting period (540 mm) occurred across 10 days.
- Rainfall events were severe and were often preceded and followed by windy conditions.
- Dust deposition data at residential sites remain well within the air quality criteria and comparable if not better than previous reporting periods. Adverse trend reflected by the continuous dust data suggest periodic difficult, short duration conditions were impacting across the monitoring period.

With regard to **Attachment B**, **Table 14** provides a list of exceedances with a "possible" in terms of a PKCT contribution with a rating of "Moderate" to "Major". **Table 14B** provides a review by PKCT of the referenced exceedances in term of site activities and control. Though no apparent failing was detected, a review of the effectiveness of current operational controls is proposed and an action included in Section 4.3.3. Aspects noted which may lead to improvement include the following;

- There is a high reliance on visual assessment by Main Control Room operators and setting appropriate cycle times in light wind conditions. This can be somewhat difficult across night time hours.
- Continuous dust monitors are accessible for reference but not integrated into site controls. There may be opportunities for alarms to be initiated under defined trigger conditions.
- Visibility of particulate emissions may vary and could perhaps be overlooked through site observations.

Surface Water

As outlined in **Figure 4A** Discharge Point P16 Water Quality- Overflows and pH (refer Section 4.3.1), EPL exceedances occurred from the Settlement Lagoon licenced discharge point though an improvement trend has been achieved. This is attributed to the dosing unit upgrade which was carried out during the reporting period.

Across the reporting period, pH values measured during discharge ranged from 6.2 units through to 9.7 units. Three pH exceedances from 68 measurements were outside of the EPL specified range of 6.5 to 9.5 pH units.

Total Suspended Solids ranged from <5mg/L to 68mg/L during the reporting period. Three TSS exceedances from 68 measurements were outside of the EPL specified range of <50mg/L. The average TSS reading for the reporting period was 24mg/L.

Oil and grease ranged from <5mg/L to 9mg/L during the reporting period. Nil exceedances from 68 measurements were outside of the EPL specified range of <10mg/L. The average Oil and Grease reading for the reporting period was <5mg/L.

Major Project Approval 08_0009 does not contain any criteria for water quality as it relies on the EPL 1625 controls. The EA identifies that the PKCT water management system is appropriate for its onsite activities and uses EPL 1625 controls as the primary document for water quality predictions. Improvement is required to ensure PKCT is consistently compliant.

GHG & Energy Efficiency

Neither EPL 1625 nor DP&I Approval 08_0009 specify criteria for GHG emissions or energy reduction. However, it is noted that;

- Greenhouse Gases - Scope 1 and Scope 2 emissions were below the National Greenhouse and Energy Reporting (NGER) scheme reporting threshold.
- Electricity – PKCT continue to seek opportunities to reduce electricity use, refer Section 4.3.8
- Whilst GHG emission calculations are not exact, the Scope 1 and Scope 2 emissions calculated by the August 2009 PKCT NGER report correspond with that calculated.
- GHG predictions in **Figure 3H** Greenhouse Gas Report – 2012/2013 of the EA compared against emissions across the reporting period indicate the following;
  - Decreased emissions associated with decreased throughput
  - Reduced efficiency (KWhr per tonne)

Table 4.4 – Summary of Kilowatt Hours, Throughput and Weather

Financial Year	Annual KWhrs	Annual Throughput	Annual Road Receival	Annual Rainfall (mm)	KWhrs per tonne	Gross Ship Loading Rate tones per hour
2005/06 (EA)	17,919,579	10,982,265			1.63	2,823
2009/10	22090524	14,128,245	5,081,041	752	1.56	2,724
2010/11	22,667,563	14,365,693	4,903,611	918	1.58	2,702
2011/12	23,712,196	14,631,834	5,399,146	1365	1.65	2,344
2012/13	22,116,901	13290571	4,040,578	1150	1.68	2,564

Considering the factors affecting the energy efficiency of current operations, the following is noted (refer to **Table 4.4**);

(a) Increased rainfall may adversely impact on energy efficiency through belts slips and wet weather loading delays. This is plausible but not conclusively supported by the data. Reporting years 2010 and 2011 were lower rainfall years with efficiency higher than reporting years 2012 and 2013 (supporting). Reporting year 2013 was less efficient than reporting year 2012 yet the rainfall was lower (not supporting).

(b) Increased road receival utilisation may lead to increased energy efficiency i.e. consistently more coal to an operating belt. This is plausible but overall operations were less energy efficient in the reporting year 2013 than for reporting year 2012 even though there was a 30% increase in road receival tonnages.

(c) Similarly, the gross ship loading rate appears to indicate there is a relationship which generally has followed an adverse trend in recent years.

(d) Rail receival efficiency has been affected by difficult coal products which are received from time to time resulting in increased time to unload a train. This means conveyors need to operate for a longer time. Any wagons requiring manual vibration would necessitate a system stop. These activities would increase energy usage and reduce efficiency.

With reference to Section 4.3.2, PKCT has commenced a study of conveyor operations examining the three operating streams Rail, Road and Shipping and is assessing energy usage and efficiency under various operating conditions (ie. conveyor empty, partially laden, full). This will assist in providing a better understanding of energy use across the operation. This work will be progressed in the next reporting period and an action has been included in Section 4.3.3.

Water Savings

Neither EPL 1625 nor DP&I Approval 08_0009 contain quantitative criteria for potable water use or reduction. However, the DP&I approval requires PKCT to investigate opportunities to reduce water use.

Figure 3G Water Usage Report shows a net increase during FY13 of total water used across the site. While the quantity of recycled water use has remained relatively similar from FY12 to FY13, 354ML to 347ML respectively, there has been an increase in potable water used from 106ML to 226ML.

Analysis of the data shows that a correlation exists between high water usage and windy conditions recorded at site. The dust control spray system at PKCT is automated so that measured extreme wind conditions (>10m/second) automatically initiate the spray cycles. PKCT will undertake a review stockpile spray system operational control during light wind conditions and at night time.

4.3.7 Justification of Exceedances

Air Quality

With reference to Section 3.3, **Figure 3D** Air Quality: Continuous Dust Data and analysis of the air quality data, PKCT was generally a minor contributor to 24 hour exceedances. The air quality methodology used to assess PKCT's compliance with DP&I TSP and PM10 criteria entails an assessment which involves differentiating PKCT from other dust sources. Also, data from PKCT's northern continuous dust monitor is used in this assessment. This monitor is located midway between PKCT and the nearest residential boundary. Notwithstanding this, a review of exceedances has identified improvement actions which will be progressed in the next reporting period.

Water Quality

The upgrade of the Settlement Lagoon dosing unit has resulted in 96% TSS compliance compared to 86% compliance across last reporting period. The average TSS result measured during this period was 24 mg/litre, well within the EPL limit of 50mg/litre. This result represents a significant improvement on last year's performance.

The TSS exceedances recorded were during high rainfall events (refer to **Attachment D**: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13). Further refinement of the system in February 2013 has resulted in no further TSS exceedances across a number of significant wet weather events.

96% compliance was achieved for pH across the reporting period. Since the commencement of recycled water use at PKCT, pH has been found at times to be outside the EPL limits potentially due to the increased nutrient levels and subsequent algal growth in collected water. Management control strategies for the pH levels in the water collection system are continuing in consultation with the EPA.

pH exceedances are considered a minor negative when viewed in terms of the significant environmental improvement associated with the introduction of recycled water use which would otherwise have formed part of Sydney Water's ocean discharges.

4.3.8 Monitoring Trends

Water Use - PKCT has observed a net increase in water usage during FY13. While the quantity of recycled water used has remained relatively similar from FY12 to FY13, 354 to 347ML respectively, there has been an increase in potable water used from 106 to 226ML. PKCT will undertake a review of operational controls associated with stockpile spray operations aiming to reduce stockpile spraying during lower wind conditions and during the evening when evaporation potentials are generally lower. This action has been recorded in Section 4.3.3.

Water Savings - Introduction of recycled water use has established a significant, sustainable improvement trend of reduced potable water consumption (refer **Figure 3G** Water Usage Report). Though total water usage and potable water usage has increased across the reporting period, the amount of recycled water used in lieu of potable water remains high, marginally lower than baseline (i.e. 345 ML v 360 ML) representing a significant potable water saving.

Water Quality of Harbour Discharges from EPL Licenced Discharge Point- Settlement Lagoon Discharges (EPL limits) – A positive trend in TSS exceedances was observed over the reporting period with compliance up from 86% to 96%. This is attributed to completion of the dosing unit upgrade and further refinement of the system during wet weather events over the course of the year.

pH compliance fell from 100% to 96% this reporting period. pH fluctuations in the water collection system are associated with the introduction of recycled water from the Sydney Water sewage treatment works and subsequent algal growth during warmer periods. **Figure 4C** shows the association between algal growth and temperature at the Settling Lagoon. Management strategies for the pH levels in the water collection system are currently being investigated in consultation with the EPA.

A positive trend in Oil and Grease exceedances was observed over the reporting period with compliance up from 98% to 100%. This is attributed to effective spill reporting and management by the shift and daywork teams throughout the reporting period.

Trends observed at EPL point 16 this reporting period were positive compared to data recorded since project approval. Attachment D highlights the long term trend for total suspended solids with annual averages well within the EPL licence limit. Improvement trend has also been demonstrated in the number of TSS exceedances which have occurred and reported through EPL Annual return.

The long term TSS average prior to this reporting period was 20mg/L. This period, the TSS average was also 20mg/L. Additionally the long term range in TSS was <5mg/L to 380mg/L. This reporting period the TSS range was <5 to 200mg/L. This result highlights an improvement in the TSS measured in the discharge from the Settlement Lagoon.

The long term Oil and Grease average prior to this reporting period was 5.2mg/L. This period, the Oil and Grease average was <5mg/L. The long term range for Oil and Grease was <5mg/L to 20mg/L. This reporting period the Oil and Grease range was <5mg/L to 9mg/L. The recorded results show a reduction of Oil and Grease in our discharge waters and an improvement since project approval.

The long term pH range prior to this reporting period was 5.9 to 10.2 pH units. This reporting period the pH ranged from 6.2 to 9.7. Our EPL upper and lower limits for pH are 6.5 to 9.5 respectively.

Energy Usage – With reference to Section 3.8.2 and Table 4.4 shows that electricity usage follows throughput closely at high throughputs though it does not drop off proportionally at lower throughputs. Currently, there is an adverse trend of reduced efficiency which appears to align with shiploading and receivals loading and unloading rates.

Waste – A summary of the major waste streams for the past three reporting periods is shown in **Attachment H**. Of these streams, Cardboard, Steel, Copper Wire and Oil/Grease are recycled while General waste is sent to landfill. **Attachment H** shows that the volume of general waste has fallen for the past three reporting periods. Most Waste volumes fluctuate across PKCT in line with major project work. In the 2011/2012 reporting period, for example, PKCT recycled 938 tonnes of scrap steel. This is significantly more than the reporting periods 2010/201 and 2012/2013. PKCT aims to reduce waste generation wherever possible across its operation.

Drivers Code of Conduct and General Complaints – Complaints are captured as part of the data collection system associated with the Drivers Code of Conduct Implementation Plan, refer to **Figure 3B** Road Transport Complaints & Incidents Summary and Tonnes – 2012/2013. While road tonnes have increased from 5.4 million tonnes to 7.0 million tonnes this reporting period, DCC related complaints remained stable with 19 and 20 respectively, refer to **Table 4.5** below. The proportion of noise and dust related complaints fell compared to last year, but the number of "Other/traffic interaction" complaints increased. The majority of "other" complaints consisted of trucks driving through red lights and rocks impacting windscreens. Complaints reported by road transport companies during this reporting period were associated with two road shippers who proportionally move the most product by road (i.e.90%- refer to **Figure 3B**).

Overall compliance and implementation of the DCC by the Road Transport Providers was positive with an increase in DCC observations from 302 to 758. In addition, 100% of inductions were completed across all the Providers. No reports of spillage on public roads and dispatch hours restriction breaches were reported across the reporting period.

There were three general complaints associated with the operation of PKCT during the 2012/2013 reporting period. This compares to two complaints each in 2011/2012 and 2010/2011 respectively. A summary of all complaints including general complaints and those associated with the Drivers Code of Conduct are presented in **Attachment G**

Table 4.5 – Summary of Complaints and Tonnes per Annum

Complaints	09/10	10/11	11/12	12/13
Tonnes per annum	5,081041	4,903,611	5,399,146	7,020,941
noise	2	2	3	1
dust	3	0	2	1
speed	19	5	4	4
Other/ traffic interaction	15	12	10	14
Total	39	19	19	20

4.3.9 Identification of Non-Compliances

EPL non compliances are referenced in **Attachment C:** EPL Licenced Discharge Point P16-Overflow Results and **Attachment D**: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.1. **Figure 4B** pH of Overflow Samples provides pH results from Settlement Lagoon overflow samples (also refer Section 3.4 - Surface Water). Non compliances related to Total Suspended Solids and pH exceedances from settlement lagoon discharges.

4.3.10 Actions to Reduce Exceedances

- Water Collection System exceedances: **Attachment D**: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 outlines actions (remedial and improvement). Actions will also be progressed through the in pollution reduction program currently in development
- Dust Emissions: Dust improvement activities form part of the FY13 Business Plan and the 2015 strategic Business Plan.
- Actions included and detailed in Section 4.3.3 herein.

- Also note Independent External Audit actions: **Attachment F**: Independent External Audit Actions Status Report - June 2013 herein.

4.3.11 Consent Condition

5. By 31 March 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
   (a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Director-General;
   (b) include consultation with the relevant agencies;
   (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL (including any strategy, plan or program required under these approvals); and
   (d) review the adequacy of strategies, plans and/or programs required under these approvals; and, if appropriate,
   (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

Note: This audit team should be led by a suitably qualified auditor, and include experts in the field of noise, air quality and traffic management.

6. Within 6 weeks of completing this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General with a response to any recommendations contained in the audit report.

7. Within 3 months of submitting the audit report to the Director-General, the Proponent shall review and if necessary revise the strategies/plans/programs required under this approval, to the satisfaction of the Director-General.

Compliance Statement

In accordance with Schedule 4, Condition 5 of DP&I approval, an independent external audit was undertaken by AECOM P/L in March 2011. A report was submitted to the DP&I on the 10th May 2011 under cover of PKCT's letter of the 10th May 2011.

PKCT carried out a review of audit findings and recommendations and, by letter of 10th August 2011, a report was submitted to the DP&I on proposed actions together with a request for clarification of some aspects of the approval conditions. DP&I provided advice by its letter of 27th October 2011.

Attachment F: Independent External Audit Actions Status Report - June 2013, reports on the status of PKCT actions. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

4.4 Access to Information

4.4.1 Consent Condition

8. Within 3 months of the approval of any strategy/plan/program required under this approval (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or AEMR, required under this approval, the Proponent shall: (a) provide a copy of the relevant document/s to the relevant agencies; (b) place a copy of the document/s on its website; and (c) remove superseded copies of strategies/plans/programs from its website. 9. During the project, the Proponent shall: (a) make a summary of monitoring results required under this approval publicly available on its website; and (b) update these results on a regular basis (at least every 6 months).

4.4.2 Compliance Statement

Condition 8 - Documents were published to PKCT's web site during the reporting period as follows;

- Environment Protection Licence May 2013 Report
- Interim Environment Management Report July-December 2012
- Noise Monitoring Report February 2013
- Environment Protection Licence Monitoring Report December 2012
- Noise Monitoring Report September 2012
- Public Pollution Incident Response Management Plan

Condition 9 – 1213 AEMR and an Interim Environment Management Report (covering the first six months of the reporting period) will be published within 3 months of the 30th June and 31st December respectively.

5.0 ENVIRONMENT PROTECTION LICENCE

PKCT holds Environment Protection Licence 1625 under the Protection of the Environment Operations Act 1997. This stipulates emission criteria that PKCT must not exceed relating to applicable environmental aspects, in particular, water, noise and dust. Pollution reduction studies and programs (PRPs) are attached to the EPL to identify aspects which may require improvement. PKCT is required to submit an annual return to the

Environment Protection Authority analysing performance against relevant criteria. The 1213 EPL Annual Return was forwarded to the EPA on the 29th May 2013.

5.1 EPL Annual Return Summary

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 reports on environmental performance and actions undertaken across the EPL annual return period. In summary, the following is noted;

(a) Non conformances were reported as follows;

i. One sample (12th October 2012) recorded a marginal exceedance of 60 mg/litre (total suspended solids (TSS)) and 9.7 pH.

ii. During a severe wet weather event commencing on the 27th January 2013, two overflow samples recorded TSS levels above EPL limit (100 mg/litre n.b. rainfall > 90 mm). This occurred on 27th January 2013 (200 mg/litre) and 30th January 2013 (140 mg/litre).

(b) Annual average dust deposition at residential sites were within 4 grams per square metre per month.

(c) Three complaints were made during the Annual Return period (April 12 - March 2013). See section 6.5 for details.

(d) Noise surveys were compliant. (refer **Attachment A**: Noise Survey- September 12-February 13: Summary of Results)

5.2 Other EPL Matters in AEMR Reporting Period

- New requirements have been introduced under the Protection of the Environment Legislation Amendment Act 2011. PKCT has implemented actions to address the new requirements as follows;
  - New reporting incident requirements have been communicated to PKCT site personnel and reporting processes have been updated.
  - With regard to the requirement for EPL holders to have Pollution Incident Response Plans, a Plan was developed and published on PKCT's website. EPA was notified by e mail on 27th August 2013, meeting the required completion date of the 1st September 2013.
  - With regard to the requirement for EPL holders to make publically available monitoring results required under the EPL, PKCT publishes monthly reports to the PKCT website. The reported format was reviewed by the EPA in an audit on the 19th September 2012. PKCT implemented some improvements to address

audit findings and the report format was approved by the EPA in its letter of 7th November 2012.

- In accordance with PRP9, PKCT submitted reports to the EPA on 30.6.12
  (a) Algae Control Review June 2012
  (b) Pollution Reduction Program Response- Pond Maintenance.
  Reports were provided by PKCT's consultant, Cardno, and address the EPL non conformances and performance matters associated with the Water Collection System reported herein. PKCT also provided advice on proposed actions to improve system performance. The reports have been reviewed by the EPA and a new pollution reduction program is being developed. In the interim, PKCT has progressed the actions as outlined in Section 4.3.2.
- PRP10 has been closed as complete and a new Pollution Reduction Program PRP11 "Install Northern Truckwash Upgrades" has been established to track progress of the project and ensure effective implementation.

6.0 PKCT COMMITMENTS

PKCT prepared a Statement of Commitments which forms part of the Environmental Assessment submitted to the DP&I for the 08_0009 Major Project Application. The DP&I accepted these commitments and they now form Appendix 2 of the consent for this Major Project approval. **Table 6.1** identifies the PKCT commitments and the section of this AEMR, which describes how PKCT will comply.

Table 6.1 – PKCT Commitments & AEMR Section

Specific Environmental Condition	AEMR Section
Traffic & Transportation	6.1
Air Quality	6.2
Water Management	6.3
Noise Management	6.4
Community Relations	6.5
Environmental Monitoring	6.6
Environmental Management System	6.7
Greenhouses Gases	6.8
Landscaping	6.9
Flora & Fauna	6.10
Waste	6.11

6.1 Traffic & Transportation

6.1.1 Commitment

Objective	Commitment
• Transport of coal and bulk products to PKCT to be conducted in a manner which does not adversely impact on public safety or amenity of road users. • Safety standards to be maintained by trucks following designated routes procedures. • Internal PKCT roadways to be maintained to minimise coal and bulk products spillage and carry over onto public roadways.	• Public road haulage of coal and bulk products to PKCT will not exceed 10 million tonnes per annum. • Publication of annual throughput tonnages, including in-loading method (i.e. road and rail received coal and bulk products). • All trucks delivering coal and bulk products to PKCT must follow designated heavy vehicle transport routes. • A driver's code of conduct will be utilised for all transport companies delivering product to PKCT. • Review effectiveness of truck wash facilities to be undertaken. • Unless further or alternative Approval for NRE No 1 Colliery at Russell Vale is in place, PKCT will only receive coal from the NRE No 1 Colliery if that coal has been dispatched from that Colliery by public road between the hours of 7am to 10pm Monday to Friday and 8am to 6pm Saturday and Sunday or Public Holidays.

6.1.2 Compliance Statement

Actions undertaken during the reporting period are as follows;

- Public road deliveries of coal and bulk products did not exceed 7.5 mtpa and the details are included in this AEMR (refer **Figure 3A** Summary of PKCT Throughput and Receivals – 2012/2013).
- An interim Environment Management Report and the AEMR is published to PKCT's websites so that information is made available to the public on a 6 monthly basis.
- The coal truck delivery route is as described and mapped in the Environmental Assessment for Major Project 08_0009. Trucks to PKCT do not deviate from this route.
- A DCC and associated Drivers Code of Implementation Plan MP.BM.453 approved by the DP&I, is in place and operational (refer Section 3.2 and Sections 4.3.2 and Sections 4.3.3 for actions undertaken and those proposed.
- Truck wash upgrade has been approved and is being implemented.

Findings/ recommendations made in AECOM P/L's independent audit undertaken in March 2011 have been noted and actions are being progressed with the DP&I in accordance with Project Approval 08_0009. A status report is provided in **Attachment F**: Independent External Audit Actions Status Report - June 2011. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

6.2 Air Quality

6.2.1 Commitment

Objective	Commitment
• Minimise dust emissions from activities carried out on the PKCT site.	• Installation of two continuous dust monitors to monitor airborne dust emissions. • Maintain appropriate dust suppression systems onsite to effectively manage dust both on stockpiles and roadways.

6.2.2 Compliance Statement

PKCT's two continuous dust monitors remain operational and these provide data used in air quality assessment.

PKCT has a preventative maintenance system in place (Works and Assets) which provides for the routine inspection and maintenance of environmental equipment including existing dust suppressions systems, stockpile sprays, truck wash and water cart. Operations shift teams monitor and operate the equipment and, where necessary, provide a breakdown response.

6.3 Water Management

6.3.1 Commitment

Objective	Commitment
• Minimise use of potable water onsite. • Effective management of onsite stormwater.	• Reduction in freshwater use onsite to be achieved through the implementation of recycled water (Tertiary Treated Effluent) for dust suppression on stockpiles and other non domestic uses e.g. fire, spillage wash down, conveyor sprays. Staged approach to be implemented which will result in a 360 Megalitre per annum reduction by the end of 2010.

6.3.2 Compliance Statement

Recycled water use has continued during the reporting period. **Figure 3G** Water Usage Report provides water usage details. The target referenced in the commitment was based on a total annual usage of 510 megalitres (being a 70% reduction) which was adopted in the 2006 Water Savings Action Plan.

Recycled water use continued across FY2013 as follows;

- Total potable water usage was 225 megalitres (above baseline- 150 megalitres).
- Total water usage was 572 megalitres (above baseline- 510 megalitres).
- Total recycled water used was 345 megalitres (below baseline- 360 megalitres, though comparable to the previous reporting period).

As outlined in Sections 4.3.6 and 4.3.8, usage results were affected by weather conditions and increased water needs for dust control, together with recycled water supply interruptions by Sydney Water due to water quality issues.

6.4 Noise Management

6.4.1 Commitment

Objective	Commitment
• Responsible management of PKCT site operational noise.	• Ensure that ongoing compliance is maintained to the New South Wales Industrial Noise Policy. • Development and implementation of a noise management plan for the PKCT site.

6.4.2 Compliance Statement

Section 3.1.2 outlines actions taken during the reporting period. Noise Management Plan MP.HS.387 is in place which references the NSW Industrial Noise policy. Relevant PKCT site personnel have been made aware of the compliance requirement.

6.5 Community Relations

6.5.1 Commitment

Objective	Commitment
• PKCT to be regarded as a responsible corporate citizen by the community.	• Continued operation of the PKCT Community Consultative Committee. • Continued advertisement and operation of the telephone hotline.

6.5.2 Compliance Statement

Three complaints were received during the 2012/2013 reporting period. Details of these complaints are presented below.

1) On 6th November 2012, an anonymous complaint was made to the EPA by a local resident. The resident highlighted general dissatisfaction with air quality at their residence. PKCT provided a response to the EPA including 2012 air quality data. The EPA accepted the information and responded to the resident. No further action was sought by the EPA.

2) A complaint was made to PKCT's Main Control Room on 28th November 2012 about a laden coal truck driving along Corrimal Street in Wollongong which is an unauthorised transport route. Investigation of the event determined that the truck was not associated with coal haulage and that the resident was mistaken. The resident was appreciative of the response and expressed thanks for the prompt follow up.

3) The EPA notified PKCT of a complaint about dust emissions from PKCT in 18th January 2013. The dust event occurred during an extreme weather including high temperatures and strong winds. Investigation of the event found that PKCT dust control systems were operational, the early wind warning system was activated and, a dust report of the event indicated that PKCT was only a minor contributor to a regional dust spike during the weather conditions experienced. A review of continuous dust data was also undertaken by PKCT's air quality consultant confirming the occurrence of emissions generally across the region. A copy of the report was supplied to the EPA. No further action was sought by the EPA.

Complaints to road transport providers are outlined in **Figure 3B** Road Transport Complaints & Incidents Summary and Tonnes – 2012/2013 and **Figure 2A** Road Transport Report- 2012/2013

20 complaints were received by road transport providers across the reporting period. This is an increase of one on reporting period. (Refer Section 4.3.8).

The following actions occurred during the reporting period;

- The Community Consultative Committee met on the 25th July 2012, 28th November 2012 and 27th March 2013.
- PKCT web site continues to include e-mail and phone contact details (communitylinks@pkct.com.au).

6.6 Environmental Monitoring

6.6.1 Commitment

Objective	Commitment
• To ensure compliance to the conditions of PKCT's Department of the Environment and Climate Change licence.	• Development and implementation of a management plan which documents the environmental monitoring requirements for PKCT.

6.6.2 Compliance Statement

Environmental Management Strategy MP.HS.464 is in place and outlines monitoring requirements together with references to applicable management plans.

6.7 Environmental Management System

6.7.1 Commitment

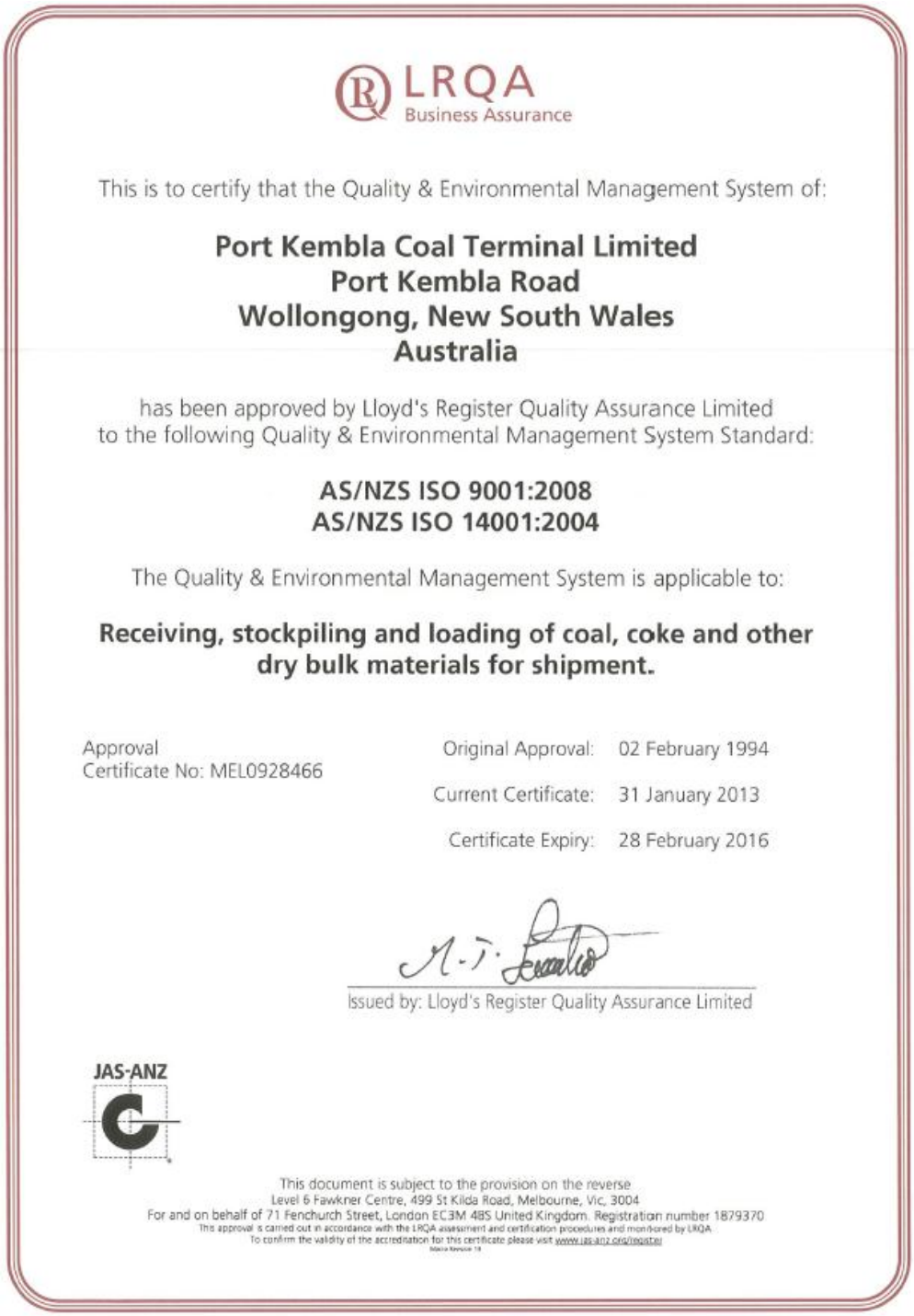
Objective	Commitment
• PKCT to maintain certification to ISO 14001.	• PKCT will continue to be certified to ISO 14001 and will be externally audited against the certification criteria on an annual basis.

6.7.2 Compliance Statement

During the reporting period, Lloyds carried out surveillance visits in August 2012 and June 2013. The Triennial recertification audit occurred in December 2012 with a follow up audit in February 2013 confirming recertification.

PKCT continues to hold certification to ISO 14001:2004 (refer **Figure 6A** below).

Figure 6A AS/NZ ISO 14001 Certification Renewal



LRQA
Business Assurance

This is to certify that the Quality & Environmental Management System of:

Port Kembla Coal Terminal Limited
Port Kembla Road
Wollongong, New South Wales
Australia

has been approved by Lloyd's Register Quality Assurance Limited
to the following Quality & Environmental Management System Standard:

AS/NZS ISO 9001:2008
AS/NZS ISO 14001:2004

The Quality & Environmental Management System is applicable to:

Receiving, stockpiling and loading of coal, coke and other dry bulk materials for shipment.

Approval
Certificate No: MEL0928466

Original Approval: 02 February 1994
Current Certificate: 31 January 2013
Certificate Expiry: 28 February 2016

Issued by: Lloyd's Register Quality Assurance Limited

JAS-ANZ

This document is subject to the provision on the reverse
Level 6 Fawkner Centre, 499 St Kilda Road, Melbourne, Vic, 3004
For and on behalf of 71 Fenchurch Street, London EC3M 4BS United Kingdom. Registration number 1879370
This approval is carried out in accordance with the LRQA assessment and certification procedures and monitored by LRQA.
To confirm the validity of the accreditation for this certificate please visit www.jas-anz.org/register

6.8 Greenhouse Gases

6.8.1 Commitment

Objective	Commitment
• Minimise the production of greenhouse gas emissions associated with PKCT operations.	• PKCT to review onsite electricity use and identify and implement economically viable opportunities for reduced electricity usage.

6.8.2 Compliance Statement

PKCT has the results of a greenhouse gas (GHG) emission and energy use assessment of the Terminal which was prepared following the Major Project Approval. This identifies the GHG emissions from the various onsite activities allowing PKCT to understand which factors relate to electricity use. The report finds that PKCT's use of electricity for powering the coal handling infrastructure is by far the largest energy user. As a result, 97% of PKCT GHG emissions are Scope 2 emissions associated with electricity generated by power stations.

PKCT has an Energy Savings Action Plan in place. Options for significant reductions are limited as electricity usage relates closely to throughput. Opportunities for energy reduction are pursued when purchasing new equipment and considered when developing improvements. Sections 4.3.2 and 4.3.3 outline work carried out in the reporting period and work proposed respectively.

6.9 Landscaping

6.9.1 Commitment

Objective	Commitment
• Improve the visual amenity of PKCT on surrounding community.	• Improve onsite soft landscaping through the planting of trees on the road receival earth bund and along the northern site boundary.

6.9.2 Compliance Statement

With reference to the Landscape Management Plan MP.HS.460 (LMP), PKCT has developed a Landscape Concept Plan along the northern boundary. During this reporting period, maintenance of Stage 2 has continued and the area is now well established. Paving has been installed adjacent (refer Section 4.3.2 and 4.3.3).

6.10 Flora & Fauna

6.10.1 Commitment

Objective	Commitment
• Management of Green and Golden Bell Frogs (GGBF).	• Implement Interim Management Plan. • Undertake a GGBF Survey and then develop a Long Term Plan of Management.

6.10.2 Compliance Statement

A Green and Golden Bell Frog Management Plan MP.HS.109 (GGBFMP) is in place, developed in consultation with the EPA and is DP&I approved (also refer Section 3.6.2, Section 4.3.2 and 4.3.3 for further details of current status).

6.11 Waste

6.11.1 Commitment

Objective	Commitment
• Minimise waste generated at the site to reduce the volume of waste requiring disposal to landfill. • Prevent dispersal of waste from the site to receiving environments.	• Develop a Waste Management Plan for the site.

6.11.2 Compliance Statement

PKCT has prepared a Waste Management Plan MP.HS.459 (WSMP) which identifies the various waste streams from PKCT and explains the methods used to firstly reuse, secondly recycle and thirdly suitably dispose of waste.

Figure 3J Waste Report provides a summary of wastes handled during the reporting period. The table lists the applicable waste streams and identifies the waste treatment employed.

7.0 CONCLUSION

This Annual Environmental Management Report (AEMR) identifies PKCT's approval and licence conditions and explains how PKCT complies with these requirements. It meets the specific AEMR requirements in Major Project Approval 08_0009 Condition 4 of Schedule 4.

This AEMR demonstrates that PKCT has undertaken appropriate actions to manage its environmental impacts with the overall aim of minimising harm to the environment. This report forms part of PKCT's environmental management system which is directed by PKCT's Environmental Management Strategy. PKCT provides this AEMR to the Department of Planning and Infrastructure and other stakeholders using information taken from environmental monitoring, assessment and reporting activities undertaken on a regular basis through the reporting period.

Reference is made at various locations in this AEMR to the independent external audit undertaken by AECOM P/L. The firm's audit was comprehensive and PKCT is addressing the audit findings and associated recommendations. Adequacy of measures employed will be verified in the next Independent External Audit scheduled for March 2014.

This AEMR does not raise any concerns regarding the ongoing ability of PKCT to comply with environmental requirements in the Major Project Approval, Environment Protection Licence 1625 and other regulatory requirements. Further, this AEMR confirms PKCT's commitment to continual improvement in the mitigation of environmental impacts.

Environmental highlights across the reporting period are noted as follows;

- Settlement lagoon dosing unit upgrade completed providing excellent post commissioning water quality results.
- Truckwash upgrade project nearing completion with final scoping offering wash performance, energy efficiency and noise reduction improvements.
- Reclaimer NLR Project completed providing coal sampler compliance , efficiency and spillage reduction improvements.

8.0 REFERENCES

- Australian / New Zealand Standard ISO 9001:2008 Quality Management Systems
- Australian / New Zealand Standard ISO 14001:2004 Environmental Management Systems
- Environment Protection Licence 1625 – Port Kembla Coal Terminal
- Major Project Approval 08_0009 for the Port Kembla Coal Terminal Project

Attachment A: Noise Survey- September 12- February 13: Summary of Results

Table 5-1 Summary of Monitoring Results – Location 1 – Corner Swan & Kembla Streets

Date & Start 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 16.40 – 16.55	Day	51	<44	59	49	2.7 - 2.9 m/s; NE	C to D	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site typically 16 truck movements witnessed and a train unloading.
20 Sept 2012 21.00 – 21.15	Evening	50	<40	55	41	0.9 – 1.3m/s; NbW to N	D	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site typically 8 truck movements witnessed and a train arrival.
20 Sept 2012 21:15 –21:30	Evening	50	<41	56	40	0.9 – 1.3m/s; NbW to N	D	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site typically 5 truck movements witnessed and a train idling.
20 Sept 2012 23:20 – 23:35	Night	49	<33	48	38	1.8 – 2.5m/s; NbE to NNE	D	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site typically 5 truck movements witnessed and a train idling.
20 Sept 2012 23:35 – 23:50	Night	49	<35	50	39	1.8 – 3.3m/s; NbE to WbN	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 3 truck movements witnessed and a train idling.

Attachment A: Noise Survey- September 12- February 13: Summary of Results (continued)

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.

Attachment A: Noise Survey- September 12- February 13: Summary of Results (continued)

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.

Attachment A: Noise Survey- September 12- February 13: Summary of Results (continued)

Table 5-1 Summary of Monitoring Results – Location 1 – Corner Swan & Kembla Streets

Date & Start 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
27 Feb 2013 15.05 – 15.20	Day	51	<45 (26)	60	51	4.2 - 4.9 m/s NNE	D	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site typically 4 truck movements witnessed and a train unloading.
27 Feb 2013 19.20 – 19.35	Evening	50	<45 (25 – 32)	60	47	1.3 - 2.3 m/s NE	D	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site 1 truck movement witnessed and a train unloading.
28 Feb 2013 00.45. – 01.00	Night	49	29 (26 - 29)	44	42	0.9 - 2.2 m/s NE	F	YES Not Audible	At measurement location noise primarily from road traffic noise. PKCT activities not audible. On-site typically 7 truck movements witnessed. No other notable noise.
28 Feb 2013 01.00. – 01.15	Night	49	<33 (25 - 27)	48	41	1.7 - 2.3 m/s NNE - NE	F	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 7 truck movements witnessed. No other notable noise.

Attachment A: Noise Survey- September 12- February 13: Summary of Results (continued)

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
27 Feb 2013 14.35 – 14.50	Day	51	<47 (27 – 30)	62	50	4.0 – 5.0 m/s NNE	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 5 truck movements witnessed. No other notable site noise. Train unloading.
27 Feb 2013 19.50 – 20.05	Evening	50	<51 (33)	66	58	1.2 – 1.7 m/s NE	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 2 truck movements witnessed and a train arriving and unloading.
28 Feb 2013 00.00. – 00.15	Night	49	<36 (23 – 30)	51	41	0.4 – 0.9 m/s NNE - NE	D-E	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 6 truck movements. No other notable site noise.
28 Feb 2013 00.15. – 00.30	Night	49	<33 (21 – 29)	48	41	0.6 – 0.9 m/s NNE	E-F	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site typically 10 truck movements. No other notable site noise.

Attachment A: Noise Survey- September 12- February 13: Summary of Results (continued)

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
27 Feb 2013 15.30 – 15.45	Day	51	<56 (35 – 36)	71	55	3.9 – 4.3 m/s NNE	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. Train unloading. On-site typically 9 truck movements. No other notable site noise.
27 Feb 2013 18.45 – 19.00	Evening	50	<45 (34 – 38)	60	51	1.9 – 3.1m/s NNE	D	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site there were no truck movements witnessed. There was a train unloading.
28 Feb 2013 01.30. – 01.45	Night	49	<45 (34)	60	41	0.6 – 0.8 m/s N - NNE	E-F	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site there were 12 truck movements witnessed and a train arriving.
28 Feb 2013 01.45. – 02.00	Night	49	<44 (34 – 35)	59	49	0.6 – 1.3m/s N - NNE	D-E	YES Not Audible	At measurement location noise primarily from road traffic. PKCT activities not audible. On-site there were 10 truck movements witnessed and a train unloading.

Attachment B: Extract from Katestone Air Quality AEMR July 2012- June 2013

Executive Summary

Katestone Environmental has been commissioned by Port Kembla Coal Terminal Limited (PKCT) to report the results of its air quality monitoring program during each 12-month (July – June) period and to assess the compliance of the monitoring data with the Port Kembla Coal Terminal Approval Conditions. The Port Kembla Coal Terminal is located in the Inner Harbour at Port Kembla, NSW. This Annual Environmental Monitoring Report (AEMR) details the results of ambient air monitoring program and the compliance of PKCT during the July 2012 to June 2013 period. This AEMR is required to be submitted to the Department of Planning (DOP) by 31 July 2013 in accordance with PKCT's Approval Conditions.

The current monitoring network includes the following:

- *Continuous measurements of wind speed and wind direction, and concentrations of TSP, PM_{10}, $PM_{2.5}$ and $PM_{1.0}$ at locations to the north and south of the PKCT (northern and southern monitoring sites)*
- *The northern monitoring station is located at the Wollongong sewage treatment plant and is approximately 400 metres north of the PKCT train unloading facility. Residences are about 700 metres north of the monitoring station and, consequently, the monitoring results will overstate the influence of PKCT on dust levels at residences.*
- *A network of residential dust deposition gauges*
- *Offsite measurements of TSP and PM_{10} concentration provided by Bluescope and the OEH*

The following conclusions can be drawn from the analysis of the meteorology recorded at the PKCT northern and southern monitoring sites at Port Kembla during July 2012 to June 2013:

- *The data capture rate for meteorological parameters (wind speed and wind direction) was 99% and 100% at the PKCT northern and southern monitoring sites, respectively, during the July 2012 to June 2013 period*
- *The annual average wind speeds recorded at the PKCT northern and southern sites were 3.1 m/s and 3.7 m/s, respectively*
- *Approximately 17% (northern site) to 20% (southern site) of winds were recorded from the north, while 20% (northern and southern sites) were observed from the south*
- *The frequency of winds from the north was slightly higher during the evening (6pm to midnight) and night (midnight to 6am) periods and during autumn and winter*
- *The frequency of winds from the south was slightly higher during the afternoon (midday to 6pm) and during the summer months.*

Attachment B: Extract from Katestone Air Quality AEMR July 2012- June 2013 (continued)

The following conclusions can be drawn from the analysis of the ambient dust (TSP, PM_{10} and $PM_{2.5}$) monitoring data from the PKCT northern and southern monitoring sites, the offsite TSP (Bluescope Vikings Oval site) and OEH PM_{10} (sites at Wollongong, Kembla Grange and Albion Park South) monitoring data during July 2012 to June 2013:

- *The annual data capture rate for dust parameters was between 96.7% and 97.1% at the PKCT northern site, and between 90.9% and 92.2% at the PKCT southern site*
- *The annual average concentration of TSP at the PKCT northern monitoring site (62.4 µg/m³) was below the air quality criterion of 90 µg/m³*
- *The annual average concentration of PM_{10} at the PKCT northern monitoring site (46.8 µg/m³) exceeded the air quality criterion of 30 µg/m³*
- *At the northern PKCT monitoring site the trigger level of 90 µg/m³ for the 24-hour average TSP concentration was exceeded on 62 occasions during the July 2012 to June 2013 period, while the 24-hour average PM_{10} air quality standard of 50 µg/m³ was exceeded on 102 occasions.*
- *PKCT was identified as making either no contribution or a minimal contribution (0% to 10%) to the exceedance of the 24-hour average TSP trigger level at the PKCT northern monitoring site on 36 out of the 62 exceedance days. On a further three exceedance days, the contribution was undetermined, due to unavailability of monitoring data.*
- *PKCT was identified as having a minor contribution (i.e. 10% to 30%) to the exceedance of the 24-hour average TSP trigger level at the PKCT northern monitoring site during the following 19 days:*
    - *5, 20 and 25 October 2012*
    - *7, 8, 25 and 27 November 2012*
    - *17 December 2012*
    - *6, 7, 26, 29 and 30 January 2013*
    - *21-23 February 2013*
    - *16, 22 and 23 March 2013*
- *PKCT was identified as having moderate contribution (i.e. 30% to 70%) to the exceedance of the 24-hour average TSP trigger level at the PKCT northern monitoring site during the following three days:*
    - *18 December 2012*
    - *20 December 2012*
    - *4 March 2013*
- *PKCT was identified as having a major contribution (i.e. greater than 70%) to the exceedance of the 24-hour average TSP trigger level at the PKCT northern monitoring site on the following day:*
-
    - *3 March 2013*
- *PKCT was identified as making either no contribution or a minimal contribution (0% to 10%) to the exceedance of the 24-hour average PM_{10} trigger level at the PKCT northern monitoring site on 62 out of the 102 exceedance days. On a further six*

Attachment B: Extract from Katestone Air Quality AEMR July 2012- June 2013 (continued)

exceedance days, the contribution was undetermined, due to unavailability of monitoring data.

- *PKCT was identified as having a minor contribution (i.e. 10% to 30%) to the exceedance of the 24-hour average PM_{10} trigger level at the PKCT northern monitoring site during the following 26 days:*
  - *13 September 2012*
  - *3, 5, 20 and 25 October 2012*
  - *7, 8, 20, 22, 25 and 27 November 2012*
  - *2 and 17 December 2012*
  - *2, 6, 7, 19, 26, 29 and 30 January 2013*
  - *21-23 February 2013*
  - *12, 22 and 23 March 2013*
- *PKCT was identified as having moderate contribution (i.e. 30% to 70%) to the exceedance of the 24-hour average PM_{10} trigger level at the PKCT northern monitoring site during the following 7 days:*
  - *26 November 2012*
  - *18 and 20 December 2012*
  - *2, 4, 14 and 15 March 2013*
- *PKCT was identified as having a major contribution (i.e. greater than 70%) to the exceedance of the 24-hour average PM_{10} trigger level at the PKCT northern monitoring site on the following day:*
  - *3 March 2013*

Attachment B: Extract from Katestone Air Quality AEMR July 2012- June 2013 (continued)

Table 19 Exceedances of the 24-hour average TSP trigger level of 90 µg/m³ at Vikings Oval and corresponding measurements from PKCT northern and southern monitoring sites during July 2012 to June 2013

Date	24-hour average TSP concentration (µg/m³)			Contribution of PKCT to 24-hour concentration
	Bluescope HiVol air sampler at Vikings Oval	PKCT northern monitoring site	PKCT southern monitoring site	
19 October 2012	97	166	152	1%
25 October 2012	140	167	142	19%
6 November 2012	100	253	183	6%
29 January 2013	140	184	132	27%
10 February 2013	120	170	129	4%
22 February 2013	110	108	56	17%
28 February 2013	110	No data	92	Analysis unavailable

Attachment B: Extract from Katestone Air Quality AEMR July 2012- June 2013 (continued)

Table 10 PKCT contribution ratings for exceedance days during July 2012 to June 2013

PKCT contribution rating	Number of TSP exceedance days with rating	Number of PM_{10} exceedance days with rating
None	12	21
Minimal (0% to 10%)	24	41
Minor (10% to 30%)	19	26
Moderate (30% to 70%)	**3**	**7**
Major (70% to 100%)	**1**	**1**
Unclassified (missing data) [a]	3	6
Total exceedance days	**62**	**102**

Table note: [a] See Section 6.1.3.5 for a discussion of these exceedances with missing data from the southern site

Attachment B: Extract from Katestone Air Quality AEMR July 2012- June 2013 (continued)

Table 14 Exceedances at the northern PKCT monitoring site during the July 2012 to June 2013 period for which the estimated PKCT contribution was over 30%

Date (2012 – 2013)	Exceeding pollutant(s)	24-hour average concentration (µg/m³)	Likelihood of PKCT contribution	% of winds from PKCT (south)	Contribution of PKCT to 24-hour concentration			PM_{10} / TSP (%)	$PM_{2.5}$ / TSP (%)	Wind speed (m/s)	
					µg/m³	%	Rating			Maximum	Average
26 Nov	PM_{10}	64.3	Possible	85.4%	21.8	34%	Moderate	77%	25%	4.6	2.7
18 Dec	TSP	135.9	Possible	22.2%	43.3	32%	Moderate	73%	17%	4.8	2.0
	PM_{10}	99.8	Possible		30.5	31%	Moderate				
20 Dec	TSP	167.4	Possible	70.8%	55.8	33%	Moderate	76%	16%	8.6	3.7
	PM_{10}	126.4	Possible		42.1	33%	Moderate				
2 Mar	PM_{10}	51.0	Possible	100.0%	24.9	49%	Moderate	74%	24%	9.0	5.6
3 Mar	TSP	121.2	Possible	91.7%	92.0	76%	Major	78%	22%	8.4	5.6
	PM_{10}	95.1	Possible		70.1	74%	Major				
4 Mar	TSP	117.8	Possible	28.5%	39.9	34%	Moderate	75%	14%	6.0	3.4
	PM_{10}	88.0	Possible		29.1	33%	Moderate				
14 Mar	PM_{10}	54.6	Possible	73.6%	22.6	41%	Moderate	65%	21%	6.4	3.7
15 Mar	PM_{10}	50.1	Possible	72.2%	20.2	40%	Moderate	67%	15%	5.5	3.2

Table 14B- PKCT Commentary on Site Controls

PKCT's stockpile spray system was operational and controlled by the Main Control Room based on weather forecasts and site observations. Operators have access to Bureau of Meteorology information on line and there is an early wind warning system in place to detect southerly winds. There is no system failure apparent which may have led to the reported exceedances. It is noted that the stockpile spray system was turned off on the 3rd March 2013 and for a period on the 4th March 2013. This followed a significant wet weather event and was undertaken after site assessment.

Date	Site operations	Environmental Controls	Event Reports/ Observations
26th November	Ship: "Crystal Wind" at berth Rail: 28,804 tonnes unloaded Road: 26,094 delivered	Spray system operation: auto control: "On" Main Control Room: system/ visual checks; spray isolations as needed Winds generally below 10 m/s	No reports of dust emissions
18th December	Ship: none at berth Rail: 22,968 tonnes unloaded Road: 27,654 delivered	Spray system operation: auto control: "On" Main Control Room: system/ Visual checks; spray isolations as needed Winds light, generally below 5 m/s	No reports of dust emissions
20th December	Ship: none at berth Rail: 22,620 tonnes unloaded Road: 32,054 delivered	Spray system operation: auto control: "On" Main Control Room: system/ Visual checks; spray isolations as needed Winds generally below 10 m/s; above 10 m/s in evening.	No reports of dust emissions
2nd March	Ship: none at berth Rail: no receivals Road: no receival	Spray system operation: auto control: "Off" Main Control Room: system/ visual checks; spray isolations as needed Winds generally below 10 m/s	75 mm rain recorded on previous days; 13 mm on the day- site saturated. No reports of dust emissions
3rd March	Ship: none at berth Rail: no receivals Road: no receivals	Spray system operation: auto control: "Off" Main Control Room: system/ visual checks; spray isolations as needed Winds generally above 10 m/s across night reducing to below 10 m/s across day.	No reports of dust emissions
4th March	Ship: none at berth Rail: 13,435 tonnes unloaded Road: 13,250 delivered	Spray system operation: auto control: "Off"; turned "On" in afternoon Main Control Room: system/ visual checks; spray isolations as needed Winds generally below 10 m/s; strengthening in the afternoon to above 10 m/s.	No reports of dust emissions
14th March	Ship: none at berth Rail: 20,592 tonnes unloaded Road: 20,080 delivered	Spray system operation: auto control: "On" Main Control Room: system/ visual checks; spray isolations as needed Winds generally below 10 m/s; periods approaching 10 m/s or marginally over	No reports of dust emissions
15th March	Ship: none at berth Rail: 19,954 tonnes unloaded Road: 18,396 delivered	Spray system operation: auto control: "Off" Main Control Room: system/ visual checks; spray isolations as needed Winds generally below 10 m/s	No reports of dust emissions

Attachment C: EPL Licenced Discharge Point P16- Overflow Results

Settlement Lagoon Overflow July 12 – June 13

Date	Time	Sampler	Report No.	pH (pH units)	TSS (mg/litre)	Oil and Grease (mg/litre)	Ammonia (mg/litre)	Total Nitrogen (mg/litre)	TKN (mg/litre)	TON (mg/litre)	Filterable Phosphorus (mg/litre)	Total Phosphorus (mg/litre)
EPL Licence Limits				Range (6.5 - 9.5)	>50	<10						
06/07/2012	7:30:00 AM	SDG	SE110089R0	7.3	<5	<5	0.17	3.3	0.20	<0.05	0.24	0.27
11/07/2012	7:25:00 AM	RB	SE110089R0	7.2	<5	<5	<0.01	4.1	0.66	0.66	0.18	0.27
12/07/2012	11:00:00 AM	NB	SE110125R0	7.3	<5	<5	0.10	3.6	<0.05	<0.05	0.23	0.25
13/07/2012	7:30:00 AM	KG	SE110232R0	7.5	<5	<5	0.17	4.4	0.62	0.45	0.26	0.20
14/07/2012	7:00:00 AM	KG	SE110232R0	7.3	<5	<5	0.06	4.3	0.58	0.52	0.23	0.20
15/07/2012	7:30:00 AM	KG	SE110232R0	7.0	<5	<5	0.10	4.0	0.36	0.26	0.24	0.19
23/07/2012	11:30:00 AM	AB	SE110458R0	8.1	11	<5	0.29	4.0	1.3	1.0	0.076	0.26
12/10/2012	12:15:00 PM	AC	SE112798R0	9.7	60	<5	0.13	3.6	2.8	2.7	0.005	0.26
13/11/2012	2:15:00 PM	AC	SE113950	6.6	<5	<5	0.04	2.0	0.62	0.58	0.096	0.21
28/11/2012	6:25:00 AM	RB	SE113950	9.4	18	<5	0.06	3.1	2.3	2.24	0.005	0.24
19/12/2012	TBA	TBA	SE114418R0	9.3	30	<5	0.02	3.5	2.6	2.6	0.003	0.20
27/12/2012	11:17:00 AM	RB	SE114483R0	9.1	12	<5	0.15	2.8	1.5	1.3	0.066	0.22
11/01/2013	1:40:00 PM	RB	SE114708R0	7.8	12	<5	1.7	3.0	3.0	1.2	0.13	0.19
13/01/2013	3:15:00 PM	TL	SE114708R0	8.9	19	<5	1.2	3.1	3.1	2.0	0.063	0.21
	TBA	TBA	SE114708R0	7.9	15	<5	1.8	3.4	3.2	1.4	0.15	0.23
22/01/2013	4:30:00 PM	RB	SE14856R0	8.0	9	9	2.2	4.1	3.9	1.7	0.13	0.30
	TBA	T	SE14856R0	8.4	5	<5	1.7	2.9	2.9	1.1	0.16	0.23
27/01/2013	6:30:00 AM	KG	SE114935R0	7.5	200	<5	0.20	3.2	2.4	2.2	0.094	0.24
28/01/2013	2:45:00 PM	SDG	SE114935R0	7.4	47	<5	1.7	3.3	2.8	1.1	0.19	0.28
29/01/2013	2:20:00 PM	SDG	SE114956R0	6.7	51	<5	0.10	1.0	0.79	0.69	0.050	0.10
30/01/2013	1:40:00 PM	SDG	SE115047R0	6.9	140	<5	0.04	2.2	1.8	1.7	0.051	0.11
31/01/2013	6:40:00 AM	SDG	SE115047R0	7.2	80	<5	0.04	1.3	1.1	1.0	0.051	0.07
01/02/2013	11:15:00 AM	WB	SE115047R0	7.2	60	<5	0.04	1.2	0.92	0.88	0.043	0.06
01/02/2013	7:05:00 PM	RB	SE115047R0	7.1	47	<5	0.08	1.1	0.84	0.76	0.030	<0.05
02/02/2013	6:30:00 PM	RB	SE115047R0	7.2	5	<5	0.11	0.70	0.38	0.26	0.051	0.06
03/02/2013	6:30:00 PM	RB	SE115047R0	7.3	<5	<5	0.07	0.86	0.45	0.37	0.044	<0.05
04/02/2013	1:30:00 AM	KG	SE115160R0	6.8	<5	<5	0.15	1.8	1.4	1.2	0.044	<0.05
12/02/2013	8:30:00 AM	WB	SE115160R0	7.5	<5	<5	0.29	0.72	0.69	0.40	0.054	0.13
13/02/2013	1:15:00 PM	AB	SE115514R0	9.4	14	<5	0.20	1.6	1.1	0.87	0.003	0.09
17/02/2013	9:40:00 AM	WB	SE115456R0	7.0	10	<5	0.09	1.7	0.46	0.37	0.11	0.06
23/02/2013	8:30:00 AM	KG	SE115685R0	7.5	14	<5	0.73	2.6	1.40	0.71	0.030	0.12
24/02/2013	8:45:00 AM	DB	SE115685R0	7.6	12	<5	0.36	2.7	1.3	0.91	0.012	0.12

NB TSS (total suspended solids) - under EPL, a TSS water quality limit of 50mg/litre pertains. Exceedance of this limit is permitted provided a 5 day average of 100 mg/litre isn't exceeded providing this occurs solely due to excessive rainfall of at least 90mm over any consecutive 5 day period. With regard to the storm event commencing 27th January 2013, 264 mm of rain was recorded and the average TSS across the period was 96 mg/litre. The event identified some further commissioning adjustments to the settlement lagoon dosing unit which was needed and carried out. With reference to **Attachment D**, the two high TSS reading were reported as EPL non compliances in the 12/13 EPL Annual Return.

Attachment C: EPL Licenced Discharge Point P16- Overflow Results (continued)

Date	Time	Sampler	Report No.	pH (pH units)	TSS (mg/litre)	Oil and Grease (mg/litre)	Ammonia (mg/litre)	Total Nitrogen (mg/litre)	TKN (mg/litre)	TON (mg/litre)	Filterable Phosphorus (mg/litre)	Total Phosphorus (mg/litre)
EPL Licence Limits				Range (6.5 - 9.5)	>50	<10						
	TBA	TBA	SE115685R0	7.4	20	<5	0.13	1.6	0.55	0.43	0.035	0.07
25/02/2013	10:15:00 AM	AB	SE115749R0	7.0	11	<5	0.03	1.3	0.56	0.52	0.033	0.08
27/02/2013	2:30:00 PM	AB	SE115815R0	6.8	7	<5	0.40	1.3	0.68	0.28	0.062	0.08
01/03/2013	8:00:00 AM	LA	SE115815R0	6.9	14	<5	0.08	1.3	0.51	0.43	0.037	0.06
02/03/2013	9:00:00 AM	LA	SE115815R0	7.0	21	<5	0.05	1.5	0.59	0.54	0.066	0.11
03/03/2013	2:00:00 PM	LA	SE115815R0	7.0	20	<5	<0.01	1.7	0.8	0.75	0.056	0.11
06/03/2013	8:00:00 AM	KG	SE115998R0	7.5	6	<5	0.22	1.5	0.65	0.43	0.065	0.09
07/03/2013	6:30:00 AM	KG	SE115998R0	7.2	11	<5	0.28	1.7	0.88	0.60	0.039	0.09
03/04/2013	8:50:00 AM	KG	SE116522R0	7.0	38	<5	0.37	2.6	1.6	1.2	0.092	0.19
04/04/2013	7:00:00 AM	KG	SE116629R0	7.4	33	<5	0.22	2.6	1.10	0.91	0.17	0.21
05/04/2013	7:00:00 PM	SDG	SE116629R0	6.8	19	<5	0.08	2.2	0.80	0.71	0.12	0.17
06/04/2013	12:15:00 PM	MS	SE116629R0	7.0	11	<5	0.11	2.1	0.77	0.66	0.12	0.17
07/04/2013	6:00:00 PM	SDG	SE116749R0	6.4	6	<5	0.09	2.0	0.19	0.11	0.19	0.23
08/04/2013	2:40:00 PM	WB	SE116749R0	6.2	7	<5	0.06	2.5	0.77	0.71	0.18	0.25
16/04/2013	6:55:00 AM	RB	SE116969R0	7.4	17	<5	0.14	2.5	0.78	0.64	0.15	0.20
19/04/2013	6:30:00 AM	KG	SE117031R0	7.4	7	<5	0.22	2.2	0.61	0.39	0.15	0.18
20/04/2013	6:45:00 AM	KG	SE117031R0	7.5	15	<5	0.15	2.6	0.75	0.60	0.17	0.31
21/04/2013	6:30:00 AM	KG	SE117031R0	7.3	10	<5	0.10	1.5	0.45	0.35	0.14	0.14
27/04/2013	8:40:00 AM	WB	SE117186R0	8.1	<5	<5	0.18	2.1	0.66	0.48	0.13	0.20
20/05/2013	12:00:00 PM	AB	SE117953R0	8.5	8	<5	0.46	4.1	1.7	1.2	0.17	0.21
23/05/2013	8:00:00 AM	AB	SE117954R0	8.5	28	<5	0.27	4.1	1.4	1.2	0.15	0.21
24/05/2013	7:00:00 AM	WB	SE117954R0	7.5	16	<5	0.10	2.2	0.47	0.37	0.17	0.15
25/05/2013	2:30:00 PM	WB	SE117954R0	7.2	8	<5	0.07	2.1	0.46	0.39	0.16	0.14
28/05/2013	7:45:00 AM	DB	SE117990R0	7.7	<5	<5	0.15	2.2	0.51	0.36	0.19	0.19
28/05/2013	3:30:00 PM	DB	SE117990R0	7.7	8	<5	0.13	2.1	0.37	0.25	0.19	0.18
29/05/2013	8:00:00 AM	DB	SE117990R0	7.6	7	<5	0.10	2.1	0.47	0.36	0.18	0.18
02/06/2013	0915AM	RB	SE118083R0	7.5	<5	<5	0.23	2.3	0.55	0.31	0.19	0.21
03/06/2013	0645AM	WB	SE118083R0	7.7	<5	<5	0.22	2.2	0.27	0.05	0.20	0.21
12/06/2013	1400PM	RB	SE118331R0	7.5	8	<5	0.04	2.9	0.41	0.37	0.23	0.21
23/06/2013	0915AM	WB	SE118602R0	7.9	6	<5	0.03	3.0	0.89	0.86	0.17	0.22
24/06/2013	0645AM	KG	SE118602R0	7.3	5	<5	0.08	2.2	0.55	0.47	0.15	0.17
25/06/2013	0700AM	KG	SE118631R0	7.0	19	<5	0.06	1.1	0.3	0.2	0.097	0.09
26/06/2013	11.30AM	KG	SE118648R0	7.0	6	<5	0.04	0.55	0.29	0.24	0.037	<0.05
27/06/2013	07.00AM	KG	SE118648R0	7.1	5	<5	0.05	0.71	0.30	0.26	0.038	<0.05
28/06/2013	10.45AM	RB	SE118726R0	6.9	24	<5	0.04	1.3	0.71	0.67	0.048	<0.05
29/06/2013	10.45AM	RB	SE118726R0	6.9	27	<5	0.10	1.3	0.84	0.74	0.034	<0.05

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13

PKCT Annual Return Report 2012/2013

1.1 Non Compliance Description: Water quality parameter exceeded EPL limit
(a) Licence condition number not complied with:
L3 Concentration Limits L3.1 Monitoring Point 16- the concentration of a pollutant discharged at that point, or applied to an area, must not exceed the concentration limits specified.
(b) Summary of the particulars of the non-compliance.
Three samples exceeded the specified concentration limits.
(c) Further details on particulars of the non compliance
1) One sample (12th October 2012) recorded a marginal exceedance of 60 mg/litre (total suspended solids (TSS)) and 9.7 (pH). 2) During a severe wet weather event commencing on the 27th January 2013, two overflow samples recorded TSS levels above EPL limit (100 mg/litre n.b. rainfall > 90 mm). This occurred on 27th January 2013 (200 mg/litre) and 30th January 2013 (140 mg/litre). An event report was submitted to the EPA as detailed in the correspondence referenced in Section 2- Event Report No. 5 herein.
(d) Dates when the non compliances occurred
1) 12th October 2012 2) 27th January 2013 and 30th January 2013
(e) Causes of the non compliance
As part of an improvement action associated with PRP9 (refer Section 6.2 herein), the settlement lagoon dosing unit was upgraded during the reporting period. The upgrade was significant including an online back up unit and a conductivity meter to monitor polymer levels in the dosing stream and to alarm when necessary. The dosing unit was operational across both 1) and 2) events and may not have been fully effective. 1) TSS exceedance was marginal. Algae in the lagoon may have contributed to the TSS and it was the cause of the pH exceedance.

2) As indicated in the event report, investigation has been unable to precisely determine a root cause though it is considered that the dosing unit's performance across the rain event was not fully effective. Since commissioning in the first quarter of 2012/13 financial year, the weather has been very dry and the January 2013 storm event has provided the unit its first significant test.

(f) Actions taken or will be taken to mitigate any adverse effects of the non– compliance.

System checks were made across the January 2013 wet weather event though it was difficult to ascertain whether the dosing unit was working correctly and flocculent was being added at the correct concentration. Shift personnel have been instructed on the upgraded dosing unit control arrangements though experience across rain events with the unit in operation has been limited.

(g) Actions taken or will be taken to prevent recurrence of the non-compliance.

Further testing, adjustments and some remedial work have been carried out on the dosing unit, control system and the conductivity meter. The dosing unit has been monitored across subsequent wet weather events. Across these events further harbour discharges have occurred. 16 overflow samples have been taken, all compliant with average TSS of 11 mg/litre.

Further instruction on dosing unit will be provided by Asset Management personnel to relevant personnel across the four shift teams responsible for operational control and engineering response. This will further improve system monitoring and trouble shooting. This will be completed by June 2013.

Work is progressing under Pollution Reduction Plan 9 refer (Section 6.2 herein) relating to algae controls.

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

Event Report No.	Date of Event	Event Description	EPA Pollution Line Notification	Further EPA communications
1	5.6.12	Settlement lagoon polymer spill.	EPA Pollution Line Reference No. 137605 PKCT: Not deemed "material", precautionary report only	Event report sent by PKCT to EPA via letter of 26th July 2012.
2	24.6.12	TS1 pond collection pond overflow.	EPA Pollution Line Reference No. 138058 PKCT: Not deemed "material", precautionary report only	Event report sent by PKCT to EPA via letter of 26th July 2012.
3	27.12.12	Truckwash outage- unwashed trucks left PKCT site.	Not notified to EPA Pollution Line, not deemed "material" PKCT email notification 27th December 2012 sent to EPA (Wollongong Office).	Refer event report below.
4	1.2.13	Water collection system- pump failure.	Not notified to EPA Pollution Line , not deemed "material" PKCT email notification 1st February 2013 sent to EPA "Wollongong Office".	EPA letter of 8th February 2013 sent to PKCT requesting an event report. Event report submitted by PKCT to EPA via letter of 1st March 2013.

5	27.1.13 and 30.1.13	Water Collection System- settlement lagoon discharges: total suspended solids exceedances	Exceedance identified subsequent to storm event when test results were received.	Event report sent by PKCT to EPA via letter of 22th April 2013.

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

Truck Operations at Road Receival- Unwashed trucks leaving site
(a) Summary of the particulars of the event.
Due to a power interruption to the north truckwash, the truckwash was not operational during which road receival continued and unwashed trucks left the site.
(b) Further details on particulars of the event.
Outage occurred approximately between 8:30-11:30 am during which there were light receivals from public road i.e. 10 trucks per hour. Springhill Road and Port Kembla Road were inspected and appeared clean with no observable adverse impacts.
(c) Dates when the event occurred.
27th December 2012.
(d) Causes of the event.
The root cause of the event was a planned isolation carried out by PKCT maintenance personnel. This resulted in an unintended power interruption to the truckwash. The fact that rail receival isolation affects the truck wash operation (road receival operation) was misleading and not apparent to PKCT personnel undertaking the high voltage maintenance task. There are no PKCT personnel based at the road receival. Operations are managed remotely by the Main Control Room (MCR). PKCT's truckwash is in the midst of an upgrade and the control system wasn't able to detect the problem and alarm the MCR. Truck drivers didn't notify PKCT of the problem.
(e) Actions taken or will be taken to mitigate any adverse effects of the event.
Once the outage was detected by PKCT, trucks were diverted to the south truck wash and power was promptly reinstated. Exit roads were inspected and the truck company contacted. EPA was notified and an event was raised in PKCT's event management system for investigation.
(f) Actions taken or will be taken to prevent recurrence of the event.
Key actions are as follows; • Event reported to personnel through site meetings to increase awareness. - complete. • Event was reported to the Road Users Forum in January 2013. The forum includes road transport company representatives. Truck drivers' obligations to report were reiterated and representatives were asked to convey back to their drivers. - complete. • Power supply interface between the rail receival and truck wash was communicated to site maintenance personnel for consideration in future task planning. -complete. • As part of the north truckwash upgrade, enhancements will be provided in the control system to detect outages e.g. loss of electrical power supply, loss of network communications and failure of key equipment with alarming back to the Main Control Room. - in progress.

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

PORT KEMBLA COAL TERMINAL
DUST & WEATHER MONITOR LOCATIONS

30th October 2012

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	Linkside Apartments, Ross Street
	C1	Continuous Dust Monitor 1
	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

Dust Deposition Data

Dust deposition results are provided as follows;

- Refer to Section B2 of the 2012/13 EPL Annual Return
- **Attachments** "**C**" and "**D**" provide reports from PKCT's service provider covering the reporting period.

3.3 Sampling

With reference to Section B2 of the 2012/13 EPL Annual Return, 196 samples were taken from the 14 EPL monitoring points referenced therein. No samples were lost.

3.4 Dust Deposition Results

Though PKCT is a potential dust source, there are a variety of sources contributing to the air quality within Wollongong's air shed. Dust sources exist within the district and may also be external. Sources also extend beyond the industrial precinct e.g. traffic, construction activities, domestic combustion and incineration, sea spray.

With regard to industrial sources the following chart based on 2012/13 National Pollution Inventory data (PM10) illustrates the relative contributions reported.

Reference: National Pollution Inventory Data: 2012/13

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

BlueScope Steel Port Kembla Steelworks	1,499,919
Metropolitan Collieries Pty Ltd	61,911
Coalcliff Coke Works	47,436
Corrimal Coke Works	43,241
Port Kembla Coal Terminal	**37,110**
Dendrobium Mine	27,574
BANZ, Mills & Coating - Springhill	4,900
TRUenergy Tallawarra Pty Ltd	3,977
Industrial Galvanizers Port Kembla	1,821
Boral Asphalt Port Kembla	991
Orica Port Kembla Site	332
Shinagawa Glastonbury Avenue site	275
Wollongong Sewage Treatment System	193
BOC Gases Port Kembla	106

Dust deposition testing includes a determination of ash and combustible matter. Combustible matter is taken as a guide relating to coal and coke dust though combustible particulates may also emanate from a variety of sources other than PKCT. Dust deposition results may also be affected by local effects from residential activities.

With reference to the charts 3.5 (a) and 3.5 (b) herein, dust deposition recorded at PKCT's residential monitoring sites indicate the following;

(a) 157 Church Street; Ross Street, Vikings Oval- apart from the two samples referenced in (b), all monthly samples and the annual average for the three sites were below the annual average air quality criteria.

(b) Vikings Oval- two samples (July 2012 and January 2013) recorded very high results which were inconsistent with other results. Petrographic analysis indicated that this was most likely due to local effects indicated by high levels of insect/ plant remains possibly associated with landscaping and mowing.

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

COAL & ORGANIC PETROLOGY SERVICES ABN 71 107 385 008
UNIT 23 80 BOX ROAD TAREN POINT 2229 NSW AUSTRALIA
02 95240403 FAX 02 5267083 admin@organicpetrology.com

Attention: **SGS Australia Pty Ltd** **1/2**
26 Swan Street, Wollongong NSW 2500

Job No. WV20381 July 2012 **Our ref: EM764**

E-mail: graham.allen@sgs.com

REPORT FOR DUST SAMPLE

1. A dry dust sample on 110mm dia papers, Vikings Oval, July 2012, was received 26/07/2012, with a request to carry out microscopical examination, in particular to identify the presence of any coal and coke.

2. The sample was examined at 50x magnification under a stereo-microscope to attempt to identify the dust constituents. There was clearly a small amount of coal and minerals, but the sample was mainly plant fragments with minor insect fragments. The coarser plant/insect fragments were screened out at 0.125mm and both fractions examined to determine coal percentage.

   The dust constituents are grouped as:
   - coal & coke
   - inorganic (clays, etc.)
   - insect and plant remains

   The relative volume proportions of coal etc. are described as:

Major -	>30%
Minor-	5% - 30%
Trace -	<5%

TABLE 1.0 MICROSCOPIC IDENTIFICATION

Sample	Coal & coke	Soil, Minerals; quartz, iron oxides, clay, etc.	Insect and Plant Remains
WV20381 Vikings Oval July 2012 (light deposit) EB930	Angular to sub-rounded; 0.4 - <0.01mm, generally <0.1mm. **Minor, 5% - 7%**	Sub-angular to rounded; 0.3 - <0.01mm, generally <0.1mm. Trace small black magnetic grains. **Minor, 10% - 15%**	Mainly plant fragments, minor insect fragments. **Major, 80% - 85%**

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

COAL & ORGANIC PETROLOGY SERVICES ABN 71 107 385 008
UNIT 23 80 BOX ROAD TAREN POINT 2229 NSW AUSTRALIA
02 95240403 FAX 02 5267083 admin@organicpetrology.com

Attention: **SGS Australia Pty Ltd** **1/2**
26 Swan Street, Wollongong NSW 2500

Job No. WV **January 2013** **Our ref: EM793**

E-mail: graham.allen@sgs.com

REPORT FOR DUST SAMPLE

1. A dry dust sample on 110mm dia paper, Vikings Oval, January 2013, was received 26/02/2013, with a request to carry out microscopical examination, in particular to identify the presence of any coal and coke.

2. The sample was examined at 50x magnification under a stereo-microscope to attempt to identify the dust constituents. There was clearly a small amount of coal and minerals, but the sample was mainly plant fragments with minor insect fragments.

   The dust constituents are grouped as:
   - coal & coke
   - inorganic (clays, etc.)
   - insect and plant remains

   The relative volume proportions of coal etc. are described as:

   Major- >30%
   Minor- 5% - 30%
   Trace - <5%

TABLE 1.0 MICROSCOPIC IDENTIFICATION

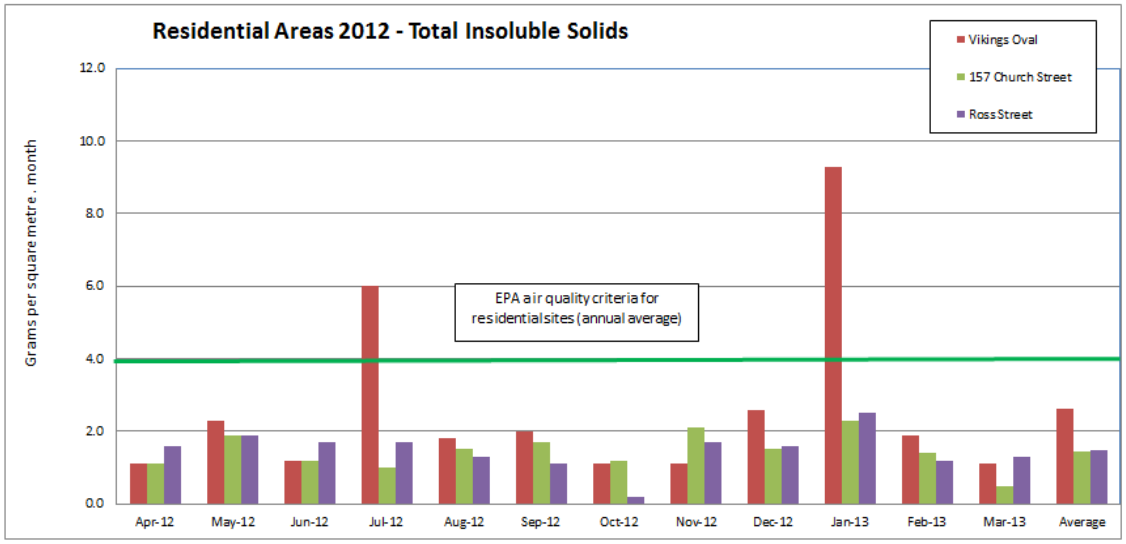
Sample	Coal & coke	Soil, Minerals; quartz, iron oxides, clay, etc.	Insect and Plant Remains
WV Vikings Oval Jan 2013 (very light deposit)	Angular to sub-rounded; 0.2 - <0.01mm, generally <0.05mm.	Sub-angular to rounded; 0.1 - <0.01mm, generally <0.05mm. Trace small black magnetic grains.	Mainly plant fragments, minor insect fragments.
EB981	**Trace, 1% - 2%**	**Trace, 1% - 2%**	**Major, >95%**

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

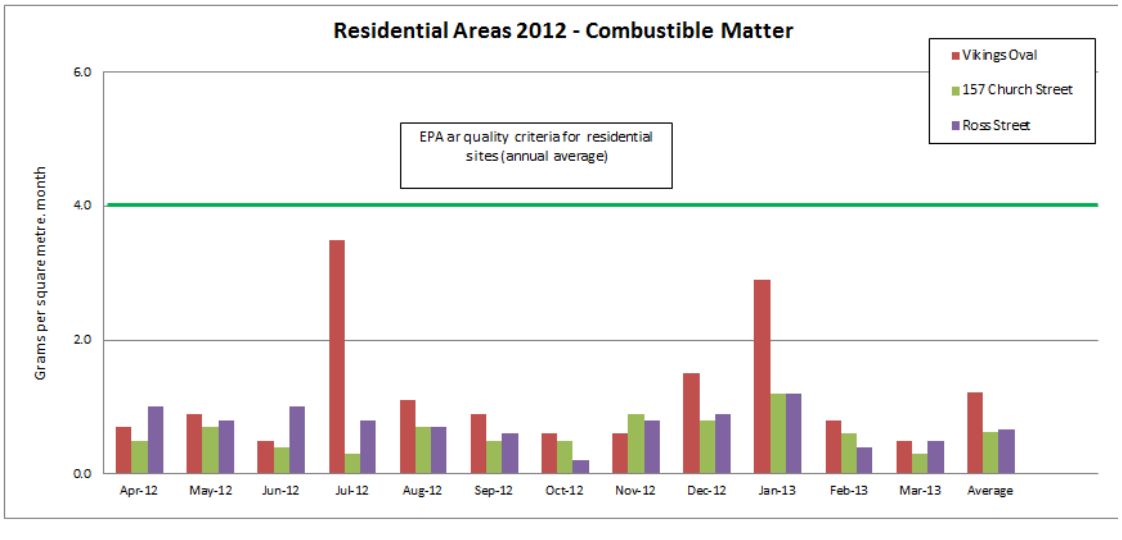
PKCT Annual Return Report 2012/2013

Residential Dust Deposition Charts

Total Solids		Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
Vikings Oval		1.1	2.3	1.2	6.0	1.8	2.0	1.1	1.1	2.6	9.3	1.9	1.1
157 Church Street		1.1	1.9	1.2	1.0	1.5	1.7	1.2	2.1	1.5	2.3	1.4	0.5
Ross Street		1.6	1.9	1.7	1.7	1.3	1.1	0.2	1.7	1.6	2.5	1.2	1.3



Combustible Matter		Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
Vikings Oval		0.7	0.9	0.5	3.5	1.1	0.9	0.6	0.6	1.5	2.9	0.8	0.5
157 Church Street		0.5	0.7	0.4	0.3	0.7	0.5	0.5	0.9	0.8	1.2	0.6	0.3
Ross Street		1.0	0.8	1.0	0.8	0.7	0.6	0.2	0.8	0.9	1.2	0.4	0.5



Attachment D Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

Noise Monitoring

4.1 General

In accordance with PKCT's Noise Monitoring Management Plan MP.HS.387 (NMP), two noise surveys were carried out in September 2012 and March 2013 and noise results were within the specified limits. Associated reports are provided in **Attachments** "**E**" & "**F**" herein.

Water Collection and Discharge Monitoring

5.1 General

Water quality sampling and testing was undertaken during the reporting period of overflows from Point 16 specified in the EPL together with pond sampling and testing, as requested by the EPA (refer to **Attachment** "**B**"), associated with the use of recycled water on site. Test results are provided in **Attachments** "**C**" and "**D**".

5.2 Point 16

Over the annual return period, 54 samples were taken of overflows from PKCT's EPL discharge point 16 (Settlement Lagoon) into Port Kembla Harbour. **Tables 5.2** and **5.3** provide a summary of the results. Work is progressing under U1 Pollution Reduction Program 9 (PRP9- refer Section 6.2 herein) to improve performance. Key points are noted as follows;

(a) As part of PRP9, the EPA has extended the pH range to 6.5-9.5. 53 samples of the 54 taken across the reporting period were within this range. 6 samples were outside the 6.5-8.5 range.

(b) TSS- Three TSS exceedances occurred across the reporting period. Improvements implemented under PRP9 have improved reliability and system performance (refer Chart 5.2).

(c) Oil/ grease- There were no oil/grease non compliances.

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

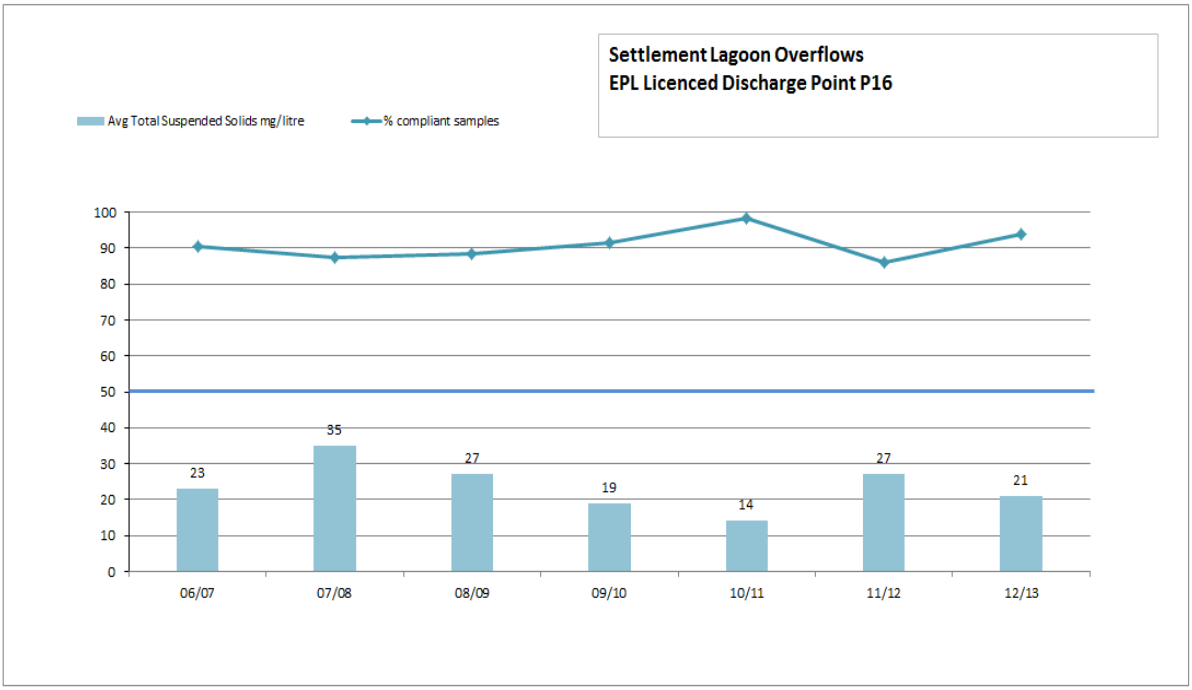


Chart 5.2 TSS Performance Trend

April 2012-March 2013	EPL Limit	unit	Compliant Samples	Total Samples	% Compliance	Average
pH*	6.5-9.5		53	54	98	not applicable
Total Suspended Solids	less 50	mg/litre	51	54	94	21
Oil/grease	less 10	mg/litre	54	54	100	less 5

*pH range extended by EPA n.b. PRP9

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

SETTLEMENT LAGOON OVERFLOW: ENVIRONMENT PROTECTION LICENCE MONITORING: POINT 16				
Environment Protection Licence: 1625 Type of Monitoring: water quality Frequency: daily grab sample when discharging	water quality parameter pH total suspended solids (milligrams per litre) oil/ grease (milligrams per litre)		EPL Limit (100 percentile) 6.5-9.5* less than 50 less than 10	
Sample Date	pH (pH units)	total suspended solids (milligrams per litre)	oil/ grease (milligrams per litre)	Commentary on Results
02/04/2012	9.3	11	less than 5	EPL compliant
19/04/2012	7.3	12	less than 5	EPL compliant
20/04/2012	7.1	23	less than 5	EPL compliant
21/04/2012	7.3	5	less than 5	EPL compliant
27/04/2012	7.5	5	less than 5	EPL compliant
29/04/2012	7.7	5	less than 5	EPL compliant
30/04/2012	7.1	10	less than 5	EPL compliant
25/05/2012	7.2	8	less than 5	EPL compliant
05/06/2012	7.5	5	less than 5	EPL compliant
08/06/2012	7.3	5	less than 5	EPL compliant
11/06/2012	7.4	5	less than 5	EPL compliant
12/06/2012	7.3	8	less than 5	EPL compliant
13/06/2012	7.3	5	less than 5	EPL compliant
14/06/2012	7.3	5	less than 5	EPL compliant
17/06/2012	7.1	10	less than 5	EPL compliant
26/06/2012	7.3	5	less than 5	EPL compliant
27/06/2012	7.1	5	less than 5	EPL compliant
06/07/2012	7.3	5	less than 5	EPL compliant
11/07/2012	7.2	5	less than 5	EPL compliant
12/07/2012	7.3	5	less than 5	EPL compliant
13/07/2012	7.5	5	less than 5	EPL compliant
14/07/2012	7.3	5	less than 5	EPL compliant
15/07/2012	7	5	less than 5	EPL compliant
23/07/2013	8.1	11	less than 5	EPL compliant
12/10/2012	9.7	60	less than 5	pH,total suspended solids marginally outside EPL limits; algae conttrol trial in progress
13/11/2012	6.6	5	less than 5	EPL compliant
28/11/2012	9.4	18	less than 5	EPL compliant
19/12/2012	9.3	30	less than 5	EPL compliant
27/12/2012	9.1	12	less than 5	EPL compliant
11/01/2013	7.8	12	less than 5	EPL compliant
13/01/2013	8.9	19	less than 5	EPL compliant
14/01/2013	7.9	15	less than 5	EPL compliant
16/01/2013	8.4	5	less than 5	EPL compliant
22/01/2013	8.0	9	9	EPL compliant
27/01/2013	7.5	200	less than 5	TSS EPL exceedance- EPL limit 30 across significant rain event; some dosing unit pronblems occrurred associated with upgrade commissioning work
28/01/2013	7.4	47	less than 5	EPL compliant; EPL limit 30 mg/litre across significant rain event
29/01/2013	6.7	51	less than 5	EPL compliant; EPL limit 30 mg/litre across significant rain event
30/01/2013	6.9	140	less than 5	TSS EPL exceedance- EPL limit 30 across significant rain event; some dosing unit pronblems occrurred associated with upgrade commissioning work
31/01/2013	7.2	80	less than 5	EPL compliant; EPL limit 30 mg/litre across significant rain event
01/02/2013	7.2	60	less than 5	EPL compliant; EPL limit 30 mg/litre across significant rain event
01/02/2013	7.1	47	less than 5	EPL compliant
02/02/2013	7.2	5	less than 5	EPL compliant
03/02/2013	7.3	<5	less than 5	EPL compliant
04/02/2013	6.8	<5	less than 5	EPL compliant
12/02/2013	7.5	<5	less than 5	EPL compliant
13/02/2013	9.4	14	less than 5	EPL compliant
17/02/2013	7	10	less than 5	EPL compliant
23/02/2013	7.5	14	less than 5	EPL compliant
24/02/2013	7.6	12	less than 5	EPL compliant
pkct to advise	7.4	20	less than 5	EPL compliant
25/02/2013	7	11	less than 5	EPL compliant
27/02/2013	6.8	7	less than 5	EPL compliant
01/03/2013	6.9	14	less than 5	EPL compliant
02/03/2013	7.0	21	less than 5	EPL compliant
03/03/2013	7.0	20	less than 5	EPL compliant
06/03/2013	7.5	6	less than 5	EPL compliant
07/03/2013	7.2	11	less than 5	EPL compliant
total suspended solids (milligrams per litre)- all samples		1148		
total number of samples		54		
average TSS		21		

Table 5.3 Summary of Results

Attachment D: Extract from EPA EPL Annual Return: 1.4.12 to 31.3.13 (Continued)

PKCT Annual Return Report 2012/2013

Environment Protection Licence Pollution Reduction Programs

6.1 General

By EPA letter of 19th June 2012, a Notice of Variation to Licence No.1625 was issued to PKCT entailing the following;

- Closed PRP: PRP 10- Environmental Improvement Program, Review Truck Wash Performance was closed (completion date: 30 July 2012).
- New PRP: U2 PRP 11- Environmental Improvement Program, Install Northern Truck Wash Upgrades was added to the EPL.

There are currently two open pollution reduction programs on the EPL. Status reports are provided in Sections 6.2 and 6.3 herein.

6.2 U1 PRP 9: Performance Upgrades of the Stormwater Control System

DELIVERABLES	Status
1. By 31 October, the licensee must:	
(a) Discuss with the supplier (Sydney Water Corporation) chlorine residual and total phosphorus concentrations in the recycled water received at the premises. The nominated water quality criteria for the recycled water formed the basis on which environmental assessments for its reuse were undertaken.	Complete- By PKCT letter of 29th June 2012, a written report was submitted to the EPA on actions completed as required by the PRP. Sydney Water has adjusted its chlorination process and recycled water supplied is now compliant. In determining the water quality specification for recycled water, it was noted from the onset that, apart from using low nutrient water from the treatment plant, Sydney Water would

	have no further ability in its treatment processes to adjust nutrient levels. Sydney Water forecast that it would be able to supply nitrogen and phosphorus levels of 9 mg/litre and 2 mg/litre respectively (50 percentile). In commissioning the Recycled Water project, Sydney Water found it was unable to meet its forecast of 9 mg/litre (50 percentile) for total nitrogen. This was revised to 16 mg/ litre (50 percentile) subject to confirmation of suitability by PKCT. The total phosphorus level remained unchanged. If not suitable, PKCT is not bound to use the recycled water and may revert to potable water supply or possibly reduce nitrogen through a recycle water/ potable water "mix". Monitoring data has indicated Sydney Water is supplying recycled water in accordance with the recycled water specification as varied. PKCT is seeking to continue to do so to maximise potable water savings and address the algae/ pH issues through alternated controls.
(b) Upgrade the surface water level detector at the Settlement Lagoon discharge structure. This item has been reported by the licensee	Complete- After further review and servicing, it was decided to continue with this detector as it now appears to

as un-reliable causing problems for sample collection during discharge	be satisfactory. Installation of a remote camera to visually check/ verify that an overflow is occurring was considered but not proceeded with. Current controls are considered adequate.
(c) Replace the in-line mixer in the chemical dosing unit	Complete.
(d) Improve chemical mixing by installing a baffle in the Settlement Lagoon inlet channel.	Complete- in line mixer has improved dosing and provides the necessary mixing to activate the polymer.
(e) Thoroughly investigate the installation of a separate back-up chemical dosing unit that will operate when the primary dosing unit fails. Also provide for the installation a flow switch and conductivity meter at the chemical dosing unit to inform the licensee's operations staff when a dosing unit failure occurs. The flow switch alarms if the flow of chemical in the pipe ceases. The conductivity meter aims to detect and alarm if the dosing pump fails. The investigation must proceed to the point at which a decision could be made to purchase and install the dosing unit.	Complete- Dosing unit has been upgraded. The upgrade included a backup dosing unit, installation of associated meters and alarming together with a new polymer storage tank with associated level alarming.
(f) Install a trash rack at the Workshop Pond to collect litter for proper disposal.	Complete.
2. By 30 June 2012, the licensee must install chemical dosing and/or implement Settlement Lagoon operation and/or management regimes to ensure pH in all	In progress- By PKCT letter of 29th June 2012, a written report was submitted to the EPA on actions completed as

discharges to Port Kembla Harbour is between 6.5 and 8.5. (Note: The upper limit for pH has been increased for the duration of this PRP.)	required by the PRP. This included reports by consultant, Cardno (a) Algal Control Review June 2012 (b) Pollution Reduction Program Response- Pond Maintenance.
3. 30 June 2012, the licensee must:	
Provide a written report to the EPA detailing the outcomes of the review of the designs of the North Pond, Central Pond and TS1 Pond as a result of the removal of baffles and/ or underflow weirs. The report must;	Complete- By PKCT letter of 29th June 2012, a written report was submitted to the EPA on actions completed as required by the PRP. This included reports by consultant, Cardno (a) Algal Control Review June 2012 (b) Pollution Reduction Program Response- Pond Maintenance.
• Provide a list of works to be installed in each pond to improve the sediment settling capabilities of each of the ponds.	Refer report
• Consider the installation of improved facilities at the North Pond, Central Pond and TS1 Pond so that proper and efficient de-silting of the ponds can be conducted to ensure compliance with the limits in this licence applying to accumulated sediment volumes. During this investigation the ponds must still be regularly maintained to ensure capacity is not reduced by more than 20%	Refer report
• Review the stormwater inlet system within the coal stockyard with the aim of reducing the ingress of coal solids into the underground pipe network. Identify, list and report to the EPA, options to improve the retention of coal within the stockyard during rainfall events.	Refer report

4. By 30 June 2012, the Licensee must provide a written report to the EPA on actions completed as required by this PRP.	Complete- By PKCT letter of 29th June 2012, a written report was submitted to the EPA on actions completed as required by the PRP. This included reports by consultant, Cardno (a) Algal Control Review June 2012 (b) Pollution Reduction Program Response- Pond Maintenance.

Across the EPL reporting period, meetings have been held with the EPA (Wollongong Office) with the aim of establishing a new pollution reduction program to track further actions. Discussions are continuing.

6.3 U2 PRP 11 – Environmental Improvement Program, Install Northern Truck Wash

DELIVERABLES	Status
Refer to EPL 1625. In summary, PRP 11 entails two key milestone dates as follows; (a) North truck wash must be upgraded by the 30th November 2013.	Upgrade work is progressing. It is expected that the new truck washing arrangements will be in place by August 2013. New equipment will be commissioned and improved washing performance will be evaluated. Additional water treatment processes have been included in the project and the need for exit boom gates will be evaluated.
(b) Carry out an effectiveness review and report to the EPA by 30th June 2014.	Review will be undertaken as scheduled.

6.0 Community Complaints

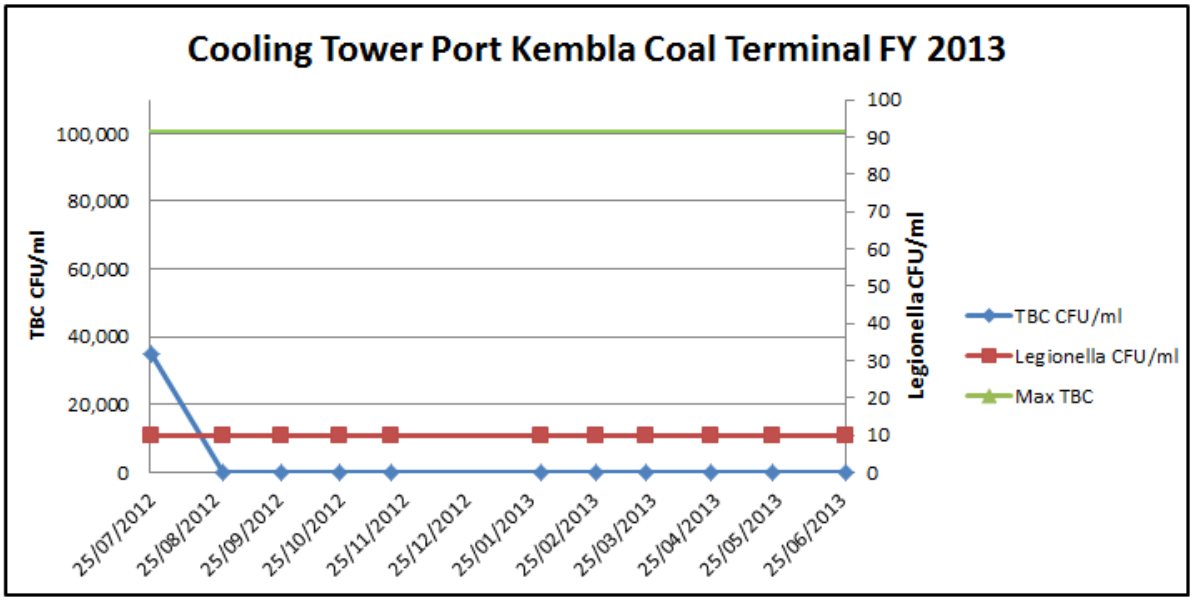
Date and Time of the Complaint:
6th November 2012 (date of EPA notification).
Method by which the complaint was made:
Telephone call was received from resident (Evans St) to EPA. EPA email sent to PKCT on 6th November 2012.
Personal details provided (or note advising otherwise):
Not provided (held be EPA)
The nature of the complaint:
Complaint related to dust and was general in nature expressing dissatisfaction felt over a number of years.
Action taken by the licensee in relation to the complaint, including any follow up contact with the complainant:
PKCT provided an email response to the EPA on the 6th November 2012 including referral to PKCT's website containing EPL monitoring data. It was noted that dust levels across 2012 at PKCT's residential sites have been within EPA guidelines. EPA accepted PKCT's response, undertook to respond to the resident and indicated the matter would be closed out.
If no action taken by the licensee, the reasons why no action was taken.
Not applicable

Date and Time of the Complaint:
28th November 2012 2100 hrs
Method by which the complaint was made:
Telephone call was received from a Corrimal Street resident to PKCT's Main Control Room (on site) to EPA.
Personal details provided (or note advising otherwise):
Not provided.
The nature of the complaint:
Complaint related to an observation that coal trucks were travelling down Corrimal Street.
Action taken by the licensee in relation to the complaint, including any follow up contact with the complainant:
Main Control Room (MCR) recorded details of the complaint and entered the event in the MCR event log. Coal transport company supervisor was contacted and indicated that trucks have GPS and non compliances would be able to be checked. He did note night time Wollongong Council truck traffic was occurring in the vicinity of the entertainment centre. MCR also observed some council trucks during the evening. The resident rang again and was informed of the above. Resident accepted the advice and thanked the MCR operator for the follow up.
If no action taken by the licensee, the reasons why no action was taken.
Not applicable

Date and Time of the Complaint:
18th January 2013 2230 hrs
Method by which the complaint was made:
Telephone call was received from resident to EPA. EPA email to PKCT on 24th January 2013.
Personal details provided (or note advising otherwise):
Not provided; held by the EPA
The nature of the complaint:
Complaint was related to air pollution from PKCT. 'Strong winds have swept up large amounts of black dust from the Port Kembla Coal Terminal, Port Kembla Road, Inner Harbour Wollongong on 18th January 2013 at 20:30'
Action taken by the licensee in relation to the complaint, including any follow up contact with the complainant:
EPA sought PKCT's advice on what preventative measures/adaptive management were implemented to minimise dust lift off from their stockpiles, given the southerlies were forecast and they had forewarning of the difficult conditions. PKCT provided an initial response to the EPA by email dated 30th January 2013. Further, a consultant's report analysing continuous dust data collected over the period in question was supplied to the EPA on 11th February 2013 (supply confirmed in email dated 13th February 2013). In summary, Wollongong experienced extreme wind and heat conditions on the day resulting in district wide dust emissions. PKCT's systems were operational, preparations were made prior to the southerly's arrival and dust controls were provided which mitigated dust impacts.
If no action taken by the licensee, the reasons why no action was taken.
Not applicable

Attachment E: Cooling Tower Data

Port Kembla Coal Terminal Cooling Tower Data						
Date	pH	Cond uS/cm	PO4 mg/l	Chlorides mg/l	TBC CFU/ml	Legionella CFU/ml
Max	9.5	1200	10	350	100,000	10
Min	7	800	3			
25/07/2012	7.8	1050	0	270	35,000	<10
29/08/2012	7.9	990	0	280	<200	<10
26/09/2012	8.5	846	0	300	<200	<10
25/10/2012	7.9	986	3	320	<200	<10
19/11/2012	8.6	840	2	320	<200	<10
30/01/2013	8.9	940	5	320	<200	<10
26/02/2013	8.8	960	6	320	<200	<10
22/03/2013	8.8	980	5	300	<200	<10
23/04/2013	8.9	1040	1	340	<200	<10
23/05/2013	8.4	1023	2	380	<200	<10
27/06/2013	7.9	925	1	380	<200	<10



NB a reading of 35,000 TBC CFU/ml was measured on 25/07/2012. This was well below the TBC maximum of 100,000. Results returned to the limit of measurement (<200 CFU/ml)) on the following inspection, no further actions were taken. Legionella CFU remained at <10 throughout the reporting period. No remedial action was required on the dosing unit throughout the reporting period.

Attachment F: Independent External Audit Actions Status Report - June 2013

Independent External Audit: March 2011 (reference Department of Planning and Infrastructure Approval: 08_0009

AECOM RECOMMENDATIONS FOR IMPROVEMENT

1.1. Compliance Actions: MCoA and EPL

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
1	MCoA	2.4	Term of Approval	• PKCT to maintain documentation of approval of WMP from DPI. PKCT: Recommendation accepted.	WMP forms part of the DPI submission of revised management plans submitted with this report. All MPs will need to be tracked with a record of DPI approval kept. Where review and revision of a document is in progress, a proposed completion date is provided herein. Status: 30.6.12 Complete WMP approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.
2	MCoA	3.12	Discharge Limits	• Investigate and implement measures to bring pH and TSS levels into compliance with EPL. PKCT: Recommendation accepted. • Continue to investigate continual improvements to dust management onsite to minimise off site dispersal.	Action is progressing through OEH EPL Pollution Reduction Program 9. Completion date for the PRP is 30th June 2012. Refer to 2011 AEMR Section 4.3.3 Activities Proposed for the Next Reporting Period n.b. Surface Water. Dust improvement forms part of PKCT Strategic Business Plan. A strategy is in place and will progress through the 11/12 Business Planning period. Refer to 2011 AEMR Section 4.3.3 Activities

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				PKCT: Recommendation accepted.	Proposed for the Next Reporting Period n.b. Air Quality. Status: 30.6.13 In progress; (a) Report submitted to EPA on 30.6.12 in accordance with PRP9 re. water collection system. New draft PRP being developed in consultation with EPA. Refer AEMR 2012/13 Section 4.3.2 and 4.3.3 for actions progressed and proposed. (b) Dust improvement is progressing in Business Plan FY14 under the Environment Improvement project (refer AEMR 2012/13 Section 4.3.2 and 4.3.3).
3	MCoA	3.13	Water MPlan	• Keep records of all conversations and consultation with OEH during creation of management plans. PKCT: Recommendation accepted in principle n.b. "all" • Follow up revised WMP and seek written approval from DPI. Include in Section 9.1.3 reference to the Environmental Monitoring document, which details the monitoring procedure for discharge from	Records of conversations will be confirmed via e mail or letter as appropriate; to date, no incident has occurred where an unrecorded conversation has resulted in a dispute or disagreement with OEH though it is noted that record management requires strengthening. WMP has been revised. Water Management Plan MP.HS.462 is attached. Status: 30.6.12 Complete WMP approved by EPA and DPI (refer AEMR 2011/12 Section

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				the settlement lagoon. Include in this section the specific criteria for discharge from the lagoon, taken from the EPL, to ensure compliance with part (c) of this condition. Keep WMP updated with all reasonable and feasible measures taken by PKCT to ensure that water quality criteria are being met, as discussed in the Cardno Rigby water systems review report. Formalise discussions with OEH in the WMP. Include monitoring of water quality for dust, as described in the SGS report. Confirm with OEH and DPI whether new EPL condition will be undertaken. PKCT: Accepted that the WMP requires revision, that it needs to comply with DPI approval condition 13 and DPI approval of the WMP will be required. The WMP will reference "reasonable and feasible mitigation measures", outline the "monitoring protocols" in place and outline the process for continual improvement. It is not considered appropriate or practical that the WMP be	2.4.2) with appropriate records kept.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				used as a project tracking tool or to be prescriptive like a work instruction. Where appropriate, cross references are included in associated procedures. Task/ project and performance reporting is provide in the AEMR.	
4	MCoA	3.14	GGBF MPlan	• Keep documentation of submission to Director-General. PKCT: Recommendation accepted	N.B Section 5.1 herein. Discuss administrative arrangements with DPI. Also Refer Action 16 below. Status: 30.6.12 Complete By PKCT letters of 10.8.11 and 18.11.11, DPI letter of 27.10.11 and the EPA letter clarification was obtained on administrative arrangements.
5	MCoA	3.15	Lighting Emissions	• Undertake an inspection of external lighting to determine compliance against the Australian Standard, and implement any mitigation measures identified. PKCT: Recommendation accepted.	Lightpoint Consulting Services has been engaged and work is progressing checking site lighting against the standard. Refer to 2011 AEMR Section 3.7 and Section 4.3.3 Activities Proposed for the Next Reporting Period n.b. Visual Amenity. Status: 30.6.12 Complete. Consultant report submitted in October 11 confirming with AS 4282 with no evidence found of any detrimental lighting impact on residential areas.
6	MCoA	3.16	Landscape MPlan	• Formalise submission process by sending dated letter to Director-General, for initial submission of management plans, and	N.B Section 5.1 herein. Discuss administrative arrangements with DPI.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				again with every re-submission of management plans. PKCT: Recommendation accepted; administrative arrangements require strengthening. • Devise an implementation program and include in LMP. PKCT: Accepted; Implementation program to be included in the LMP. As outlined in Section 5.2, this program does not normally form part of the Landscape Management Plan MP.HS.470 document. Implementation Plan to be included as it was a specific project commitment made under the DPI Project Approval.	LMP revised. Landscape Management Plan MP.HS.470 attached for DPI review/approval. LMP includes an implementation program. Status: 30.6.12 Complete LMP approved by the DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept. By PKCT letters of 10.8.11 and 18.11.11, DPI letter of 27.10.11 and the EPA letter clarification was obtained on administrative arrangements.
7	MCoA	3.17	Operating Conditions	• Identify and implement reasonable and feasible measures to reduce energy and greenhouse gas emissions. PKCT: DPI clarification sought; refer Section 5.1	Clarify intent and practical application of this condition with DPI. Clarify intent and practical application of this condition with

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				• Formally notify and seek approval from the Director-General, when condition includes this requirement. PKCT: DPI clarification sought.	DPI. AEMR is intended to be the means of reporting actions. Status: 30.6.12 Complete By PKCT letters of 10.8.11 and the DPI letter of 27.10.11, clarification in general terms was obtained.
8	MCoA	3.18	Greenhouse Gas & Energy MPlan	• GGEEMP and ESAP must align, and be regularly updated with attention to detail from the ESAP translating to the GGEEMP. Revisions of the ESAP should be tracked (especially in ESAP as it was apparent that PKCT was not tracking revisions of the documents, or resubmitting them to DEUS/OEH). PKCT: DPI clarification sought; refer Section 5.1 • Update performance monitoring section of ESAP to clarify progress and completion of certain tasks. PKCT: Recommendation accepted. • Formalise submission process with dated letter to Director-General to facilitate the	GGEEMP revised in accordance with Section 5.1. Discuss Section 5.1 with DPI. 2011 Energy Savings Action Plan has been updated and submitted to OEH. Performance monitoring is tracked by PKCT's Energy Savings group which meets quarterly. Actions tracked via PKCT event management system. Action reporting to continue via AEMRs and annual ESAP reports. N.B Section 5.1 herein. Discuss administrative arrangements with DPI. Status: 17.6.13 Complete. GGEEMP was approved by the DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept. By PKCT letters of 10.8.11 and 18.11.11, DPI letter of 27.10.11 and the EPA letter clarification was obtained on administrative arrangements. ESAP has been updated and submitted to OEH in August 11. Work regarding monitoring and action tracking ongoing.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				Director-General being satisfied with the GGEEMP. PKCT: Recommendation accepted; administrative arrangements require strengthening.	
9	MCoA	3.19	Operating Conditions	• Complete implementation of Transpacific suggestions to improve waste management. PKCT: Recommendation accepted. • Advise Director-General by letter of the waste summary in each AEMR. PKCT: DPI clarification sought.	Transpacific's suggestions have been reviewed, prioritised and are being implemented as appropriate. Refer to Section 3.9 Waste, 4.3.2 and 4.3.3 in the 2011 AEMR for a report on action carried out to date and actions proposed. AEMR includes a waste summary which is submitted with a covering letter. Status: 27.5.113 Complete By PKCT letters of 10.8.11 and the DPI letter of 27.10.11, clarification in general terms was obtained. Improvements progressing (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept. Further work required to improve waste monitoring and recording particularly in noting the increasing scale of projects being planned and undertaken. This is viewed as continuous improvement.
10	MCoA	3.20	Dangerous Goods	• Implement recommendation made in LRQA report: Identify the relevant legal &	Consultant, Advitech P/L, has been engaged to review PKCT's Dangerous Goods storage on site. A report has been submitted

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				other requirements for the storage of the different classes of dangerous goods / hazardous substances on the site, review and revise controls as necessary, communicate to relevant personnel & verify the effective implementation of the controls. Date for completion was 12/10. PKCT: Recommendation accepted.	and recommendations are under review. Refer 2011 AEMR Sections 3.10 Hazards, 4.3.2 and 4.3.3 on actions carried out and proposed. Actions will be tracked in PKCT's event management system and reported in the 11/12 AEMR. Status: 27.5.13 Complete. Requirements have been identified and work is complete in particular in relation to the (a) underground fuel storage tanks (b) oxy acetylene storage shed. Refer 1112 AEMR Sections 3.10 Hazards, 4.3.2 and 4.3.3. Lloyds has closed out the non conformance.
11	EPL	L1.1	Pollution of Waters	• Investigate and implement measures to bring pH and TSS levels into compliance with EPL. PKCT: Recommendation accepted. • Continue to investigate continual improvements to dust management onsite to minimise off site dispersal. PKCT: Recommendation accepted.	Refer Action 2 Status: 30.6.13- In progress (refer Action 2)
12	EPL	L3.3	Concentration Limits	• Investigate improvements to dosing systems to increase flocculation/coagulation of sediments/algae prior to discharge.	Refer Action 2 Status: 30.6.13- In progress (refer Action 2). Dosing unit has been upgraded. Environment improvement project established

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				Implement sediment pond maintenance works. PKCT: Recommendation accepted.	in FY14 Business Plan includes upgrade of central pond. Project is in development and requires project approval.
13	EPL	O4.1	Operating Conditions	• Develop maintenance works program for sedimentation ponds to maintain silt to less than 20% of design capacity, and implement regular cleaning if required to achieve this, having regard to GGBF habitat requirements. PKCT: Recommendation accepted.	Action is progressing through OEH EPL Pollution Reduction Program 9. Completion date for the PRP is 30th June 2012. A number of sedimentation ponds are very difficult to clean out and are vulnerable to wet weather. This is hampering systematic cleaning at present. Status: 30.6.13- In progress (refer Action 2). Pond capacities maintained across the reporting period.
14	EPL	O4.2	Operating Conditions	• Maintain records of days of discharge from sedimentation ponds and compare to excessive rainfall events as recorded by onsite rain gauge. PKCT: OEH clarification required.	"Excessive rainfall" is not defined in the EPL. Sedimentation ponds are licenced as overflow drains. Overflow is permitted if pond capacity is maintained and equipment is operational during wet weather. That is, rainfall is excessive if the pond's capacity is exceeded. PKCT to verify this EPL aspect and its practical application with OEH. Status: 30.6.13- In progress (refer Action 2). This was the basis of EPA approval of the water collection system and will be verified in the EPA discussions currently in progress.
15	EPL	U2.1	GGBell Frog	• Keep records of all conversations and	Refer Action 3.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
			MPlan	consultation with OEH during creation of management plans. PKCT: Recommendation accepted in principle n.b. "all"	Status: 30.6.12 Complete Appropriate records kept.
16	EPL	U2.1	GGBell Frog MPlan	• Modify the GGBFMP to ensure that the Best Practice Guidelines have been included in the GGBFMP, and that the GGBFMP follows the template. PKCT: Recommendation accepted.	GGBFMP has been revised and is being reviewed by OEH. Refer 2011 AEMR Section 3.6 Biodiversity, 4.3.2 and 4.3.3 for actions undertaken and proposed. GGBFMP is attached. Status: 30.6.12 Complete GGBFMP is approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.
17	DCC	8	Compliance Monitoring	• Review and update DCC as necessary based on audit recommendations. PKCT: Recommendation accepted.	Drivers Code of Conduct and the Drivers Code of Conduct Implementation Plan MP.BM.453 (DCCIP) has been completed. Consideration was given to the audit findings/ recommendations and draft documents are currently being syndicated with road transport and shipper signatories. Status: 30.6.13 In Progress. DCC controls strengthened. DCC and DCCIMP and associated documentation have been revised internally and monitoring has been strengthened. Refer AEMR 2012/13 (Sections 3.2, 4.3.2 and 4.3.3).
18	DCC	8	Compliance Monitoring	PKCT to coordinate and collate documentary evidence of audits/monitoring undertaken by	Refer Action 17. Improved record management and administration is included in the review of DCC implementation.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				signatories and Transport Providers to the DCC. PKCT: Recommendation accepted.	Status: 30.6.12 Complete. Roles/accountabilities clarified in the revision of DCC and DCCIMP and verified through system audits.
19	MCoA	3.7	Impact Assessment Criteria	Unable to verify compliance with dust generation criteria due to the complexity of the PKCT location. PKCT do attempt to understand their contribution. PKCT: Noted.	DPI discussion point; Air quality criteria is used as a management tool by PKCT. PKCT will continue to explore ways of improving understanding of the air shed and the variety of dust sources contributing. Refer Section 4.3.3 of 1011 AEMR for actions proposed. Status: 30.6.12 In Progress. Refer AEMR 2011/12 (Sections 4.3.2 and 4.3.3) benchmarking in progress with other coal terminals. No established methodology is apparent. Petrography work undertaken across the FY12 period to increase the knowledge base relating to steel making particulate emissions. This is important in noting the proximity of BlueScope Steel, a significant, potential dust source.
20	MCoA	3.8	Operations	• PKCT to establish a record of visible air pollution and documentary evidence showing operational modification. PKCT should seek Director-General's formal acceptance of operational modification procedure.	DPI discussion point; clarify intent and practical application. Status: 27.5.13 Complete DPI provided advice in general terms and left means of keeping records to PKCT. PKCT records will continue to be taken through (a) auditing and task observations (b) event reporting via event log and event management

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				PKCT: DPI clarification sought.	system. Continuous dust deposition records are available providing an account of visible and non visible dust emissions.
21	MCoA	3.9	Operations	• PKCT should seek the Director-General's satisfaction by a letter sent to the DPI advising of the truck washing protocol. PKCT: DPI clarification sought; refer Section 5.1.	DPI discussion point; clarify intent and practical application. It is considered this isn't required. Status: 30.6.12 Complete. DPI provided advice in general terms and left means of compliance to PKCT. Truckwash Upgrade project in progress and is the subject of an EPA EPL pollution reduction program. This program will include and effectiveness assessment. Effectiveness will be reported to EPA via the PRP and to DPI via AEMR and IEMR reporting.
22	DCC	6	PKCT Road	• Develop a system to monitor speed through the truck wash. PKCT to coordinate the client mines to establish compliance with use of mine's truck wash. PKCT: Recommendation accepted.	Refer Actions 17 and 26. Critical Task Observation (CTO) process is able to provide a subjective assessment by observation. PKCT truck wash upgrade project currently in development addresses truck speed in the work scope. Status: 27.5.13 Complete Truckwash Upgrade project is in progress and is the subject of an EPA EPL pollution reduction program. This program will include and effectiveness assessment. Scope includes a traffic light system. RFID project would also provide a means of monitoring trucks on site.
23	MCoA	3.2	Noise Monitoring	• Maintain records of consultation with OEH. Add discussion to NMP regarding	PKCT's noise consultant, Wilkinson Murray (WK), has provided a report, dated 4.8.11, in response to the AECOM audit. WK's

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
			Program	the reasons as to why unattended monitoring is not undertaken. PKCT: Recommendation accepted.	noise monitoring program will be revised and changes reflected in PKCT's NMP. OEH consultation is required and records of OEH consultation will be kept. A copy of the WK report is attached. Proposed completion time is 30.11.11. Status: 30.6.12 Complete. NMP revised with consideration to audit findings and approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.
24	MCoA	3.3	Continuous Improvement	• Incorporate requirement to undertake investigations into continual improvement in NMP, and report findings in AEMR. PKCT: Recommendation accepted.	Refer Action 23. Recommendation to be included in the NMP revision. Status: 30.6.12 Complete. NMP revised with consideration to audit findings and approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.
25	EPL	M10.1	Noise Monitoring	• Additional information is to be provided during onsite monitoring which details the onsite activities at the time of measurements and to what extent this is consistent with 'normal operations', to support only undertaking attended noise measurements in the future. PKCT: Recommendation accepted.	Refer Action 23. Recommendation to be included in the NMP revision. Status: 30.6.12 Complete. NMP revised with consideration to audit findings and approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
26	DCC	4 - Mt Ousley	Haulage Routes	• PKCT (or signatories) to include observations of coal truck noise on Mt Ousley during future monitoring. PKCT: Recommendation accepted.	Refer Action 17. Draft CTO has been developed and is being reviewed by signatories. CTO has 3 parts (a) mine site (b) haul routes (c) PKCT. It is intended that this be used by DCC signatories in a more robust audit program. Status: 30.6.12 Complete. New CTO adopted by signatories and supported by spot checks by an external service provider. Refer AEMR 2011/12 Section 4.3.2 and 4.3.3.
27	DCC	4 – Bellambi Lane	Haulage Routes	• Include details regarding 3 Strikes policy for breaches in DCC. PKCT: Recommendation accepted in principle though the compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are contracted by shippers.	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Status: 30.6.12 Complete. Further to PKCT's 3 strike policy, road transport providers have their own disciplinary processes. Effective operation to be confirmed by annual system audits. Refer AEMR 2011/12 Section 4.3.2 and 4.3.3.
28	DCC	4 – Masters Road	Haulage Routes	• PKCT to coordinate expansion of monitoring and inductions by client mines to encompass compression braking on Masters Road.	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Monitoring will include all DCC requirements. Truck drivers are made aware in inductions of the noise impact

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				PKCT: Recommendation accepted.	compression braking has on residential areas and their associated obligations under the DCC. Truck drivers are appropriately licenced and responsible for the safe operation of their vehicles. To the extent it is practical to do so, compression brake use will be included in monitoring. Status: 30.6.13 In Progress. Refer Action 17.
29	DCC	4 – Springhill Road	Haulage Routes	• Include details regarding 3 Strikes policy for breaches in DCC. Although condition doesn't require or identify the frequency of monitoring, it is required to shown the level of compliance with this condition. As such, repeat Truck Driver Observations monitoring e.g. annually. PKCT: Recommendation accepted in principle though the compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are contracted by shippers.	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Status: 30.6.12 Complete. Further to PKCT's 3 strike policy, road transport providers have their own disciplinary processes. Effective operation to be confirmed by annual system audits. Refer AEMR 2011/12 Section 4.3.2 and 4.3.3.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
30	DCC	5 – Tailgate Noise	Noise Minimisation Controls	• Include details regarding 3 Strikes policy for breaches in DCC. Although condition doesn't require or identify the frequency of monitoring, it is required to shown the level of compliance with this condition. As such, repeat Truck Driver Observations monitoring e.g. annually. PKCT: Recommendation accepted in principle though the compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are contracted by shippers.	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Status: 30.6.12 Complete. Further to PKCT's 3 strike policy, road transport providers have their own disciplinary processes. Effective operation to be confirmed by annual system audits. Refer AEMR 2011/12 Section 4.3.2 and 4.3.3.
31	DCC	5 – Speed Hump Noise	Noise Minimisation Controls	• Speed hump to be re-painted to increase driver awareness and signage installed requiring reduced speeds. PKCT: Recommendation accepted.	Status: Complete.
32	DCC	8 – Compliance Monitoring	Compliance Monitoring	• Establish a monthly audit/monitoring program for DCC. PKCT: Recommendation accepted. It is recognized that a more systematic,	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Status: 30.6.13 In Progress. Refer Action 17.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				transparent audit/monitoring program is required involving all DCC signatories.	
33	MCoA	3.5	Traffic Management	• Include details regarding 3 Strikes policy for breaches in DCC. Although condition doesn't require or identify the frequency of monitoring, it is required to shown the level of compliance with this condition. As such, PKCT to establish and coordinate an audit programme of truck queuing e.g. monthly. PKCT: Recommendation accepted in principle though the compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are contracted by shippers.	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Status: 30.6.12 Complete. Further to PKCT's 3 strike policy, road transport providers have their own disciplinary processes. Effective operation to be confirmed by annual system audits. Also refer AEMR 2011/12 Section 3.2, 4.3.2 and 4.3.3.
34	MCoA	3.6	Driver's Code of Conduct	• Driver Summary Sheet to be expanded to cover queuing on local roads, and speed limits and compression braking in general, and any other requirements of the DCC not currently included.	Driver summary sheet has been revised with reference to the recommendation and currently under review by DCC signatories. Status: 30.6.12 Complete

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				PKCT: Recommendation accepted.	Driver's Summary sheet revised.
35	DCC	Driver Summary Sheet – Travel Time	Road Delivery Standards	• Documentary evidence should be provided with timing of inbound trucks from NRE No. 1 Mine as monitored by PKCT; OR Modify DCC obligation to align with MCoA, which regulates dispatch of trucks from NRE rather than receival of trucks at PKCT. PKCT: Recommendation accepted.	NRE has developed a document "NRE Drivers Code of Conduct" which includes management of truck dispatch times and record keeping. Status: 30.6.12 Complete NRE also do monthly audits, annual system audits introduced, dispatch times from NRE mine site recorded by NRE and road transport provider.
36	DCC	Driver Summary Sheet – Observe all road rules	Road Delivery Standards	• PKCT to coordinate DCC signatories' compliance monitoring of driver's adhering to road rules and speed limits. PKCT to maintain records of compliance monitoring. PKCT: Recommendation that PKCT coordinate is accepted. The means of record management and each DCC signatory's respective record management accountability needs to be considered.	Refer Action 17. Compliance monitoring, improved record management and administration is included in the review of DCC implementation. Status: 30.6.13 In progress. Refer Action 17.
37	DCC	Driver Summary Sheet –	Road Delivery Standards	• PKCT to undertake compliance reporting and periodic site checks of transport	Refer Action 17. PKCT to include this in the CTO process. Status: 30.6.13 In progress. Refer Action 17.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
		Driver's Licence		provider's induction/licensing records. PKCT: Recommendation accepted.	
38	DCC	Driver Summary Sheet – Compression Brakes	Road Delivery Standards	• PKCT to coordinate DCC signatories' to more regularly monitor compression braking by trucks. PKCT: Recommendation accepted in principle;	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Monitoring to include all DCC requirements. Truck drivers are made aware in inductions of the noise impact compression braking has on residential areas and their associated obligations under the DCC. Truck drivers are appropriately licenced and responsible for the safe operation of their vehicles. To the extent it is practical to do so, compression brake use will be included in monitoring. Status: 30.6.13 In progress. Refer Action 17.
39	DCC	Driver Summary Sheet – Minimise Vehicle Noise	Road Delivery Standards	• PKCT to expand Critical Task Observations to encompass this requirement or create and implement a new auditing/documentation process by client mines. PKCT: Recommendation accepted.	Refer Actions 17 and 26. Draft CTO includes all DCC requirements. Status: 30.6.12 Complete. refer Actions 17 and 26.
40	DCC	Driver Summary	Road Delivery Standards	• Develop a system to monitor speed through the truck wash. PKCT to	Refer Actions 17 and 22.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
		Sheet – Truck Wash		coordinate the client mines to establish compliance with use of mine's truck wash. PKCT: Recommendation accepted.	Status: 30.6.13. In Progress. Refer Actions 17 and 26.
41	DCC	4 – Major Arterial Roads	Haulage Routes	• PKCT to show evidence of truck driver's use of major arterial roads by coordinating compliance monitoring by client mines. PKCT: Recommendation accepted.	Refer Action 17. Draft CTO has been developed and is being reviewed by signatories. CTO has 3 parts (a) mine site (b) haul routes (c) PKCT. It is intended that this be used by DCC signatories in a more robust audit program. Status: 30.6.13. In progress. Refer Actions 17.
42	DCC	4 – Appin Road	Haulage Routes	• Include auditing/documentation process for driver behavior Appin Road in CTOs. PKCT: Recommendation accepted.	Refer Action 41. Status: 30.6.13. In progress. Refer Actions 17.
43	DCC	4 – Bellambi Lane	Haulage Routes	• Include details regarding 3 Strikes policy for breaches in DCC. PKCT: Recommendation accepted in principle though the compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are	Refer Action 33. Status: 30.6.12 Complete. Refer Action 33.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				contracted by shippers.	
44	DCC	4 – Masters Road	Haulage Routes	• PKCT to coordinate expansion of monitoring and inductions by client mines to encompass compression braking on Masters Road. PKCT: Recommendation accepted.	Refer Action 17. Compliance monitoring and non conformance management is included in the review of DCC implementation. Monitoring to include all DCC requirements. Truck drivers are made aware in inductions of the noise impact compression braking has on residential areas and their associated obligations under the DCC. Truck drivers are appropriately licenced and responsible for the safe operation of their vehicles. To the extent it is practical to do so, compression brake use will be included in monitoring. Status: 30.6.13 In progress. Refer Action 17, also note actions under the 7.5 MTPA to 10 MTPA noise/ transport study undertaken in August 2011.
45	DCC	4 – Springhill Road	Haulage Routes	• Include details regarding 3 Strikes policy for breaches in DCC. Although condition doesn't require or identify the frequency of monitoring, it is required to shown the level of compliance with this condition. As such, repeat Truck Driver Observations monitoring e.g. annually PKCT: Recommendation accepted in principle	Refer Action 33. Status: 30.6.12 Complete. Refer Action 33.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
				though the compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are contracted by shippers.	
46	DCC	6 – Speed Limits	Delivery Standards	• PKCT to coordinate DCC signatories' compliance monitoring of driver's adhering to speed limits. PKCT: Recommendation accepted.	Refer Actions 17 and 41. Status: 30.6.12 Complete. Refer Action 33.
47	DCC	8 – Regular Audits	Compliance Monitoring	• PKCT to formalise and coordinate DCC signatories to undertake annual compliance monitoring of speed, compression braking, truck washing and load covering. Establish regular monitoring by client mines and PKCT (where relevant) of all other requirements of the Code (e.g. Monthly). PKCT: Recommendation accepted; frequency to be determined.	Refer Actions 17 and 41. Status: 30.6.12 Complete. Refer Actions 17 and 41.
48	SoC	Designated	Traffic and	• PKCT to show evidence of truck driver's	Refer Action 17 and 41.

No	Approval	Condition/ Number	Topic	Recommendation	Actions: 10.8.11
		Transport Route	Transport	use of major arterial roads by coordinating and maintaining records of compliance monitoring by client mines PKCT: Recommendation accepted.	Status: 30.6.12 Complete. Refer Actions 17 and 41.
49	SoC	Driver's Code of Conduct	Traffic and Transport	• PKCT to update DCC to include 2 additional signatories (SCE and Minion) and submit to DPI. PKCT: Recommendation accepted.	Record check indicated SCE & Minion are, in fact, signatories to the DCC. Management of this aspect is being considered in the DCC review currently in progress. Once completed the DCC will be submitted to DPI. Proposed completion date is 30.11.11. Status: Complete 30.6.12 All road users are signatories.
50	SoC	Coal Receival from NRE Gujarat	Traffic and Transport	• Documentary evidence should be provided with regard to how the timing of inbound trucks from NRE No. 1 Mine is monitored by PKCT. PKCT: Recommendation accepted.	Refer Action 35. PKCT to consider checks against NRE procedures. Status: 30.6.12. Complete. Refer Action 35.

1.2 Improvement Actions: Adequacy of Management Plans, Strategies and Programs

PKCT Plan	Improvement Summary	Action/ Comment
General	Include a commitment to implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the operation of the project in the position description for the General Manager and senior management staff of PKCT PKCT: Recommendation accepted.	Complete
General	Improve and formalise documentation and record keeping where indicated by the audit recommendations e.g. where the satisfaction of the Director-General is required a letter should be sent to DPI advising of the relevant milestone/outcome/report revision PKCT: Recommendation accepted	DPI discussion point; practical management of PKCT/DPI interface; clarification of intent "to the satisfaction of Director-General" Status: 30.6.12 Complete.
General	Seek new planning consents and conditions if proposed future developments trigger modifications outside the scope of the current approval	Noted; confirming current process Status: 30.6.12 Complete.
General	Review the EMS and all environmental management documents within its framework and make any modifications required to obligations and requirements to establish specific, measureable, achievable, realistic and time-based	Status: 30.6.12 Complete.
General	Submit a response to the recommendations made within this report along with the IEA audit report to DPI within six weeks of the completion of the audit	Response provided by PKCT in letter of the 10th May 2011 submitting the AECOM audit report. Status: 30.6.12 Complete.

PKCT Plan	Improvement Summary	Action/ Comment
General	Implement the recommendations made by the IEA in readiness for and prior to any subsequent audits, and within 3 months of submitting the audit report to the Director-General, review and if necessary revise the strategies/plans/programs required under this approval, to the satisfaction of the Director- General	This report submitted by 10th August 2011 partially meets this requirement. As this was PKCT's first IEA, actions are not yet complete due to the following; (a) Findings / recommendations were extensive. (b) Some document reviews involve consultation with others prior to submission to the DPI. (c) PKCT seeks to meet the DPI to clarify interpretation, expectations and the means of practical application of some of the DPI approval conditions n.b. references herein. This is needed for PKCT to complete actions for some of the audit findings. Status: 30.6.12 Complete.
General	Within 3 months of the approval of any strategy/plan/program required under this approval (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or AEMR, required under this approval: (a) provide a copy of the relevant document/s to the relevant agencies; (b) place a copy of the document/s on its website; and (c) remove superseded copies of strategies/plans/programs from its website	Noted; confirming current process Status: 30.6.12 Complete.
WMP	Consolidate all documents related to water management into one revised Water Management Plan MP.HS.462 (WMP), including recommendations outlined in Section 5 of the Surface Water Systems Review	Refer Action 3. Water Management Plan MP.HS.462 has been revised and is

PKCT Plan	Improvement Summary	Action/ Comment
	by Cardno, and discharge criteria PKCT: Not accepted. Consolidation of documents into one is not considered practical or necessary. The WMP currently entails 41 pages and is an overview document. There are other management plans e.g. Recycled Water Quality Management Plan (RWMP) which needs to be in a specific format and be "stand alone" for other regulatory purposes. As outlined in Section 5.2, it is not practical or appropriate for this Plan to serve as a task/ project tracking tool. The Cardno report provided a far ranging list of options and recommendations which were risk assessed and discussed with OEH to determine what actions were to be progressed via the associated pollution reduction program.	attached. Refer Section 5.1 and 5.2- DPI discussion point Status: 30.6.12 Complete.
WMP	Maintain records of the progress of the development, submission and review of the WMP to DPI, to ensure that water management measures are physically implemented and remain a priority for PKCT PKCT: Partially accepted; records of the development, submission and review of the WMP to DPI will be kept and the process strengthened. Records and reporting on the implementation of water management measures will be through AEMRs, pollution reduction program reports or specific reports provided on request.	Refer Section 5.1 and 5.2- DPI discussion point Status: 30.6.12 Complete.
WMP	Complete the WMP to encompass reasonable and feasible mitigation measures to improve compliance against Section 120 of the POEO Act, with specific regard to the reduction of pH and mitigation of algae growth in the central settlement pond. PKCT: Refer Recommendation 3.	Refer Action 3. PKCT's view- MP is not a project tracking tool. Status: 30.6.12 Complete.

PKCT Plan	Improvement Summary	Action/ Comment
WMP	Consult with the OEH during the re-development of the WMP, and record this contact with the agency to improve compliance against MCoA 3.13 (a) PKCT: Recommendation accepted.	Refer Action 3. Status: 30.6.12 Complete.
GGBFMP	Formalise the DPI submission process, to track the progress of the report and ensure that compliance is met against 3.14 (b) PKCT: Recommendation accepted.	Refer Action 4. Status: 30.6.12 Complete.
GGBFMP	Record consultation and advice given by the OEH during the development of the GGBFMP, to ensure that this process is trackable. PKCT: Recommendation accepted.	Refer Actions 3 and 15. Status: 30.6.12 Complete.
GGBFMP	Prepare the GGBFMP in accordance with Appendix 3 of the 'Draft Recovery Plan: Green and Golden Bell Frog (Lesson 1829) Recovery Plan' (DECC 2005), Best Practice Guidelines: Green and Golden Bell Frog Habitat (DECC 2008) and the associated actions in the NSW Priorities Action Statement PKCT: Recommendation accepted.	Refer Action 16. Status: 30.6.12 Complete.
LMP	Execute the LMP from a more detailed approach to adequately fulfil this condition. For example, include an implementation program including dates, tasks and monitoring process. PKCT: Recommendation accepted	Refer Action 6. Status: 30.6.12 Complete.
GGEEMP	Align the GGEEMP and ESAP, and regularly update each with attention to detail from the ESAP translating to the GGEEMP; PKCT: Recommendation accepted	GGEEMP MP.HS.461 has been revised and is attached for DPI review/ approval.

PKCT Plan	Improvement Summary	Action/ Comment
		Status: 30.6.12 Complete.
GGEEMP	Regularly update the ESAP, and the corresponding GGEEMP, and keep filed records of revisions of the document PKCT: Recommendation accepted.	Refer Actions 7,8 Status: 30.6.12 Complete.
GGEEMP	Update the performance monitoring section of the ESAP to clarify progress and completion of certain tasks; PKCT: Recommendation accepted.	Refer Action 8 Status: 30.6.13 In progress; monitor to verify effectiveness of action close out.
GGEEMP	Review the GGEEMP to include information gathered as part of the ESAP process, including a program for the management of energy efficiency measures in PKCT. PKCT: Not accepted; n.b. Section 5.2 herein	Refer Action 8. Status: 30.6.13 In progress; monitor to verify effectiveness of action close out.
GGEEMP	Formalise the submission process of the ESAP to DEUS to track reporting in accordance with the Guidelines; PKCT: Recommendation accepted.	Refer Action 8; adopt DPI process. Status: 30.6.13 In progress; monitor to verify effectiveness of action close out.
FMP	Detail in the FMP how the organisation will assist the fire and emergency services as much as possible if there is a fire on site. Verbal assurance was given during the site audit that this does occur, however it would improve the FMP if this was included. PKCT: Recommendation accepted	PKCT has initiated discussions with the NSW Fire Brigade re. the establishment of an annual review of PKCT/ NSW Fire Brigade arrangements.

PKCT Plan	Improvement Summary	Action/ Comment
		Status: 30.6.13 In progress; PKCT/ NSW agree to annual review, FMP updated, need to embed the process.
AQMP	Revise the AQMP to define and include reasonable and feasible best practice emission mitigation measures, which may be implemented to ensure project specific air quality assessment criteria are met. Reasonable and feasible best practice measures may be developed by using the outcomes of PKCT's reviews of comparable operations, which has included the PWCS facilities at Kooragang and Carrington, Hay Point and Dalrymple Bay facilities in Mackay, and the RG Tanna facility in Gladstone. Benchmarking with regards to air quality management may also be undertaken with facilities such as Eraring Energy's Coal Fired Power Station PKCT: Recommendation accepted subject to Section 5.2.	Refer Action 7; AQMP to be reviewed. Proposed completion is 30.11.11. Status: 27.5.13 Complete Refer Action3. Community of Practice forum established with Australian Coal terminal representatives to benchmark and share best practice knowledge.
AQMP	Further investigate air quality control strategies for fine particulate emissions resulting from: • truck wash water carry-over; • the No. 1 Stockpile area; • coal covered areas beneath conveyors (at the eastern side of facility); • the sludge dry out area; • rail unloader coal spillage external to the dump station; and • the truck wash bypass lane. PKCT: Recommendation accepted; include in PKCT's Dust Management Improvement project.	Refer Action 2. Status: 30.6.13 In progress; Refer Action3. Community of Practice forum established with Australian Coal terminal representatives to benchmark and share best practice knowledge.

PKCT Plan	Improvement Summary	Action/ Comment
AQMP	The strategies identified should be included in the DMI following discussion and approval from OEH; PKCT: PKCT consults with OEH in strategy and project development as appropriate and considers OEH inputs in determining appropriate actions. PKCT has a project approval framework in place which includes business case development and project authorisations. It is not considered appropriate that OEH give prior approval to strategies PKCT might be contemplating.	Status: 27.5.13 Complete. Consultation processes in place with the EPA associated with EPL administration and pollution reduction programs.
NMP	Amend the NMP to identify representative operational scenarios for each INP period (day, evening, night), specifying the operations undertaken, the use of various equipment, the type of plant and machinery, and the average truck and rail deliveries anticipated; PKCT: Recommendation accepted.	Refer Action 25 and WK report. Status: 30.6.12 Complete. Refer Action 25.
NMP	Require that noise monitoring equipment performance is field checked prior to each period of compliance monitoring, consistent with the requirements of AS1259.1, AS1259.2 or IEC 942. Consideration should be given to providing calibration certificates with the compliance monitoring reports; PKCT: Recommendation accepted.	Refer Action 23 and WK report. Status: 30.6.12 Complete.
NMP	Amend the NMP to provide further justification why unattended noise monitoring is not appropriate for this project; PKCT: Recommendation accepted.	Refer Action 23 and WK report. Status: 30.6.12 Complete. NMP revised with consideration to audit findings and approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.

PKCT Plan	Improvement Summary	Action/ Comment
NMP	Augment the NMP to include noise management measures, including the identification of reasonable and feasible best practice noise mitigation measures, and specify ongoing investigations and commitments to the continual improvement of noise reduction measures; PKCT: Recommendation accepted.	Refer Action 24. Status: 30.6.12 Complete. NMP revised with consideration to audit findings and approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.
NMP	Involve and document consultation with OEH during the modification of the NMP PKCT: Recommendation accepted.	Refer Action 23. Status: 30.6.12 Complete. NMP revised with consideration to audit findings and approved by EPA and DPI (refer AEMR 2011/12 Section 2.4.2) with appropriate records kept.
DCC	Align the DCC obligations to the MCoA, in particular in relation to truck dispatch times from NRE to PKCT. PKCT: Recommendation accepted.	Refer Action 17. Status: 30.6.12 Complete. Refer Action 17.
DCC	Review the obligations within the DCC and modify to ensure that they are quantifiable (where possible) and measureable in all cases. PKCT: Recommendation accepted.	Refer Action 17. Status: 30.6.13 In progress. Refer Action 17.
DCC	Review the Driver Summary Sheet to ensure that all obligations within the DCC are included and provided to Road Transport Companies and Transport Providers, in the form of an updated DCC. PKCT: Recommendation accepted.	Refer Action 34. Status: 30.6.12 Complete Refer Action 34.

PKCT Plan	Improvement Summary	Action/ Comment
DCC	Review and modify the CTO to ensure that all obligations within the Program are included in the check-sheet. PKCT: Recommendation accepted.	Refer Action 26. Status: 30.6.12 Complete Refer Action 26.
DCC	Modify the categories within the CTO check-sheet to reflect environmental compliance or non-conformance with the DCC and Implementation Program PKCT: Recommendation accepted in principle though CTO is an operational check where as a check against the Implementation Program is a process audit.	Refer Action 17 and consider therein. Status: 30.6.12 Complete Refer Action 17.
DCC	Establish and implement a monitoring/auditing schedule for undertaking CTOs and intensive periods of monitoring of driver behaviour, within and external to the PKCT site; PKCT: Recommendation accepted. A reasonable level of monitoring will be undertaken compatible with findings. Driver behaviour is also monitored by NSW Police and the community on public road ways.	Refer Action 41. Status: 30.6.12 Complete Refer Action 17.
DCC	Within the Implementation Program, apportion responsibility to PKCT in relation to the coordination and collation of documentation relating to the DCC in particular the coordination of the implementation and monitoring, assessment and review of the DCC, and for ensuring that a response/follow-up of breaches of the Code is carried out; and PKCT: Recommendation that PKCT coordinate is accepted. Means of record management and each DCC signatory's respective record maintenance accountability needs to be considered.	Refer Action 36. Status: 30.6.12 Complete Refer Action 17.
DCC	Augment the Implementation Program to clearly identify the actions/investigations that will be undertaken when breaches of the DCC are reported (e.g. the '3 Strikes' process) PKCT: Recommendation accepted in principle though compliance monitoring and non conformance management is more appropriate for inclusion in the DCCIP. The 3 strike policy is PKCT's policy. Consultation is required with DCC signatories on an agreed process. Road transport companies are contracted by shippers.	Refer Action 29. Status: 30.6.12. Complete Refer Action 29.

Attachment G: Summary of all complaints 2012/2013

FY12/13 Complaints Summary					
Date	Reporting Period	PKCT Event Number	Company	Summary	PKCT Action
18/01/13	FY12/13	EV-00733		Dust Report via EPA	Event reported to Operations Superintendent and Operations Manager. Consultant was engaged to undertake a review of PKCT's dust monitoring data. Investigation findings found that dust spike occurred when winds were from direction other than PKCT and that contribution of PKCT to the generally elevated dust levels was minimal (<5%). Report was submitted to the EPA.
28/11/12	FY12/13	EV-00674		Report of coal truck on Corrimal Street with no tarp.	Event was investigated and found that the truck in question was not associated with coal haulage. Resident was notified of the outcome.
6/11/12	FY12/13	EV-00637		Anonymous complaint made to EPA re. air quality, general in nature. Not related to any specific event.	EPA was provided with dust depositional data by PKCT. EPA responded to resident. No further action was requested by EPA.
Complaints Recorded by Road Transport Operators					
Date	Reporting Period	Event Number	Company	Summary	Action
16/07/12	FY12/13	Supplied by Truck Company	Brindles	No tarp set on truck	Toolbox talk undertaken with drivers
16/07/12	FY12/13	Supplied by Truck Company	Bulktrans	Complaint via BHPB from motorist indicating that rock from truck had damaged their windscreen while travelling west along	Complaint investigated by Bulktrans. A Bulktrans truck was possibly in the area at the time however, description of incident location was not clear and so difficult to pinpoint location/truck involved if any.

				Appin Rd near Cataract Creek.	
24/07/12	FY12/13	Supplied by Truck Company	Brindles	1/2 tarp set on truck	Discussion of event with driver involved
28/08/12	FY12/13	Supplied by Truck Company	Bulktrans	Broken windscreen while travelling west along Appin Road.	Driver was contacted and company policy re. Windscreens was discussed. Driver accepted the outcome. Drivers were briefed on the issue.
6/09/12	FY12/13	Supplied by Truck Company	Brindles	Dust on road surface, Bellambi Lane	NRE committed to road sweeping at least once per week in the area.
18/09/12	FY12/13	Supplied by Truck Company	Bulktrans	Broken windscreen while travelling East along Appin Road.	Event was investigated and found that the truck was more than likely in the area at the time stated. Communication was sent indicating that Bulktrans was unable to tell if the material was off the load or had come off the road.
24/09/12	FY12/13	Supplied by Truck Company	Brindles	Coal cover	Toolbox talk undertaken with drivers
9/10/12	FY12/13	Supplied by Truck Company	Bulktrans	Complaint from another transport company that truck had been run off the road travelling down Mt Ousley.	Investigated by Bulktrans who found that it was a Bulktrans truck followed by the complainant's vehicle. The complainant's vehicle had run out of road in his lane. He said that he was travelling at 30km/h and Bulktrans truck was over the speed limit. Individual bulk trans truck was no identified.
28/11/13	FY12/13	Supplied by Truck Company	Bulktrans	Truck with no cover reported in Wollongong CBD.	Bulktrans investigated and found that their vehicles were not in the area at the time.
16/02/13	FY12/13	Supplied by Truck Company	Bulktrans	Vehicle observed travelling through red light.	Driver of vehicle was counselled and given written warning.

20/02/13	FY12/13	Supplied by Truck Company	Bulktrans	Rock hit windscreen as truck turned into Tom Thumb Rd	Bulktrans investigated incident and discussed with the driver that they were not responsible for debris on the road surface.
6/03/13	FY12/13	Supplied by Truck Company	Bulktrans	Vehicle observed travelling through red light.	Driver of vehicle was counselled and given a verbal warning.
8/04/13	FY12/13	Supplied by Truck Company	Brindles	Truck reported speeding	Brindles reviewed satellite tracking
8/04/13	FY12/13	Supplied by Truck Company	Brindles	Vehicle observed travelling through red light.	Brindles reviewed dashcam and identified that light was orange and it was not safe to stop at the time.
11/04/13	FY12/13	Supplied by Truck Company	Brindles	Vehicle observed travelling through red light.	Brindles reviewed dashcam and spoke to driver involved. Incident was in wet weather and not safe to stop. Truck was within the speed limit.
22/04/13	FY12/13	Supplied by Truck Company	Brindles	Truck reported speeding at 130km/h	Brindles reviewed satellite tracking speed report for all trucks. Highest recorded speed was 94km/h and no truck was in the area during the time of complaint.
24/04/13	FY12/13	Supplied by Truck Company	Bulktrans	Near miss, truck travelling at excessive speeds	Bulktrans investigated and identified four trucks in the area at the time. All four GPS recordings on the trucks were found to be within the signposted speed limits.
30/04/13	FY12/13	Supplied by Truck Company	Bulktrans	Truck on wrong side of road, near miss.	Driver involved was suspended from job for 1 week and issued with a final warning notice.
9/05/13	FY12/13	Supplied by Truck Company	Brindles	Truck reported speeding at 53-60km/h on Bellambi Lane	Brindles reviewed satellite tracking data and found highest recorded speed on Bellambi Lane was 52km/h.

Attachment H: Summary of major waste streams for past three reporting periods.