

Page 1 of 34

Interim Environmental Management Report 2014/2015

Reporting Period 1.7.14-31.12.14



Interim Environmental Management Report



Page 2 of 34

CONTENTS

1	IN	itroduction4			
	1.1	PURPOSE			
	1.2	SCOPE			
	1.3	ME	THODOLOGY	4	
2	M	ONITO	DRING	5	
	2.1	No	ISE	5	
	2.1	1.1	Assessment Criteria	5	
	2.1	1.2	Monitoring and Results	5	
	2.2	TRA	ANSPORT	6	
	2.2	2.1	Assessment Criteria	6	
	2.2	2.2	Monitoring and Results	6	
	2.3	AIR	QUALITY	7	
	2.3	3.1	Assessment Criteria	7	
	2.3	3.2	Monitoring and Results	8	
	2.4	ME	TEOROLOGICAL MONITORING	9	
	2.4	4.1	Assessment Criteria	9	
	2.4	1.2	Monitoring and Results	9	
	2.5	SUF	RFACE WATER	10	
	2.5	5.1	Assessment Criteria	10	
	2.5	5.2	Monitoring and Results	11	
	2.6	Вю	DIVERSITY	12	
	2.6	5.1	Assessment Criteria	12	
	2.6	5.2	Monitoring and Results	12	
	2.7	GRI	EENHOUSE & ENERGY EFFICIENCY	13	
	2.7	7.1	Assessment Criteria	13	
	2.7	7.2	Monitoring and Results	14	
	2.8	WA	NSTE	14	
	2.8	3.1	Assessment Criteria	14	
	2.8	3.2	Monitoring and Results	15	
	2.9	HA	ZARDS	15	
	2.9	9.1	Assessment Criteria	15	
	2.9	9.2	Monitoring and Results	15	
3	Co	мми	INITY RELATIONS	.15	
	3.1	Ass	SESSMENT CRITERIA	15	
	3.2	Mo	DNITORING AND RESULTS	15	
4	lni	DEPEN	IDENT EXTERNAL AUDIT 2014- STATUS OF ACTIONS	.16	

Interim Environmental Management Report

PKCT

Management Plan

Page 3 of 34

5 CONCLUSION	l	17
6 REFERENCES.		17
ATTACHMENT A.	Noise Monitoring Report - December 2014	18
ATTACHMENT B.	SUMMARY OF PKCT THROUGHPUT AND RECEIVALS	20
ATTACHMENT C.	ROAD TRANSPORT COMPLAINTS & INCIDENTS SUMMARY	2 1
ATTACHMENT D.	ROAD TRANSPORT REPORT- JULY-DECEMBER 2014	22
ATTACHMENT E.	AIR QUALITY- MONITORING SITES	23
ATTACHMENT F.	AIR QUALITY: DUST DEPOSITION	24
ATTACHMENT G.	AIR QUALITY: CONTINUOUS DUST DATA	25
ATTACHMENT H.	WEATHER MONITORING SUMMARY- JULY- DECEMBER 2014	27
ATTACHMENT I.	WATER USAGE REPORT	30
ATTACHMENT J.	SETTLEMENT LAGOON DISCHARGES: JULY-DECEMBER 2014	31
ATTACHMENT K.	GREENHOUSE GAS REPORT- JULY- DECEMBER 2014	32
ATTACHMENT L.	Energy Efficiency YTD	33
ATTACHMENT M.	Waste Report July-December 2014	34

Interim Environmental Management Report



Management Plan

Page 4 of 34

1 Introduction

1.1 PURPOSE

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

1.2 SCOPE

PKCT Major Project Approval 08_0009 was granted on the 12^{th} June 2009. The approval included a requirement for PKCT to prepare an Annual Environment Management Report (AEMR). Approval also requires an interim report covering the initial six months of the reporting period. Accordingly, the first PKCT AEMR that was submitted to the DP&E applies to the period of 1^{st} July $2009 - 30^{th}$ June 2010 (the reporting period).

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

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

1.3 METHODOLOGY

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



Page 5 of 34

2 Monitoring

2.1 Noise

2.1.1 Assessment Criteria

EPL 1625 & Major Project Approval 08_0009 describe noise emission criteria 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) LAeq (15 min)

Location	Time Period	Limits (LA _{eq,15 min} dB(A))
	Day	51
Cnr Swan St/Kembla St	Evening	50
	Night	49
	Day	51
Cnr Swan St/Corrimal St	Evening	50
	Night	49
	Day	55
Cnr Keira St/Fox St	Evening	49
	Night	45

Notes:

- (a) To determine compliance with the LAeq (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:
 - o wind speeds of up to 3 m/s at 10 metres above ground level; or
 - temperature inversion conditions of up to 3°C/100m, plus a 2 m/s source-to-receiver component drainage flow wind at 10 metres above ground level for those receivers where applicable

in accordance with the NSW Industrial Noise Policy.

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

2.1.2 Monitoring and Results

A routine noise survey was undertaken in December 2014. A summary of the monitoring data is provided in Attachment "A". Noise surveys determined that PKCT noise levels were within the noise criteria in EPL 1625 and DP&E Approval 08_0009.



Management Plan

Page 6 of 34

2.2 TRANSPORT

2.2.1 Assessment Criteria

Monitoring of Coal Transport

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

Traffic Management

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

Driver's Code of Conduct

- 3. 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.

Appendix 2- Statement of Commitments	PKCT 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. 	All trucks delivering coal and bulk products to PKCT must follow designated heavy vehicle transport routes.

2.2.2 Monitoring and Results

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

PKCT received 3,764,873 tonnes via private and public roads during the reporting period.

On 10th December 2014, PKCT identified a short period where two trucks were parked on Springhill Road during a time of extreme congestion at the road receival system. All Shippers and truck companies were alerted to this breach at the next Shippers meeting, and advised that a reoccurrence of this would not be tolerated.

On 18th December 2014, a complaint was received from a community member noting trucks parking near the bottom of Mt Ousley Road near his residence. Investigation indicated some of the trucks may have been coal trucks returning to the mine after delivering to PKCT i.e trucks leaving a major arterial road in transit. Refer to Section 3.2 for details of actions taken.

This is a Controlled Document in SharePoint Controlled Documents Library

Interim Environmental Management Report



Page 7 of 34

Management Plan

Attachments "C" and "D" provide a summary of monitoring results pertaining to road transport and the Drivers Code of Conduct. A Road Users Group (PKCT, truck companies and relevant coal and bulk products shippers) meet to review implementation and monitoring results. During this reporting period, meetings were held on 27th August 2014 and 3rd December 2014. Weekly Shippers meetings are also held to coordinate shipping and receival plans. This is facilitated by PKCT with shippers in attendance and is a forum where any issues can be raised. Outside of meetings, PKCT has communications with road transport providers where road and Drivers Code of Conduct matters can be raised and actioned.

Air Quality

2.2.3 Assessment Criteria

Impact Assessment Criteria

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

Table 3: Long term impact assessment criteria for particulate matter

Pollutant	Averaging Period	Criterion
Total suspended particulate (TSP) matter	Annual	90 μg/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	Maximum Total
		Deposited Dust Level	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.

Interim Environmental Management Report



Page 8 of 34

Management Plan

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

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

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

2.2.4 Monitoring and Results

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

Dust deposition data is reported on PKCT's web site www.pkct.com.au in a monthly Environment Protection Licence Monitoring Report.

Attachment "F" provides trend graphs for PKCT's residential sites. Dust deposition levels across the reporting period were within the assessment criteria for insoluble solids (4 Grams/m²/month) and combustible matter (2 Grams/m²/month) at residential sites.

A summary of the data recorded at the northern continuous dust monitor is presented below.

The annual average (rolling average for January to December 2014) and six-month average (July to December 2014) concentrations of TSP at the PKCT northern monitoring site were below the trigger level of $90 \mu g/m^3$.

The annual average (rolling average for January to December 2014) PM10 concentration of $28.3 \, \mu g/m^3$ at the PKCT northern monitoring site was below trigger level of $30 \, \mu g/m^3$

The six-month average (July to December 2014) PM10 concentration of 32.1 μ g/m³ at the PKCT northern monitoring site was marginally above the trigger level of 30 μ g/m³.

At the northern PKCT monitoring site the trigger level of 90 $\mu g/m^3$ for the 24-hour average TSP concentration was exceeded on 25 occasions during the July to December 2014 period, while the 24-hour average PM10 air quality standard of 50 $\mu g/m^3$ was exceeded on 42 occasions. Each TSP exceedance day was also a PM10 exceedance day.

PKCT was identified as having made, at most, a minor contribution (i.e. less than 30%) to 24 of the 25 exceedances of the 24-hour average TSP trigger level at the PKCT northern monitoring site. PKCT was identified as having made a moderate contribution (30% to 70%) on the remaining exceedance day, 13th December 2014.

PKCT was identified as having made, at most, a minor contribution (i.e. less than 30%) to 39 of the 42 exceedances of the 24-hour average PM10 objective at the PKCT northern

This is a Controlled Document in SharePoint Controlled Documents Library

Interim Environmental Management Report



_

Management Plan

Page 9 of 34

monitoring site. PKCT was identified as having made a moderate contribution (30% to 70%) on the remaining three exceedance days, 10th November 2014, 12th December 2014 and 13th December 2014. It is noted that a regional dust event was recorded by OEH and reported in the Illawarra Mercury in the same week as the December 2014 exceedance days. In the article, OEH indicated that the dust levels observed in the region were a result of dust moving in from western NSW.

Attachment "G" provides a summary of continuous dust data. Table 9 compares annual PM10 and TSP with assessment criteria.

Tables 6 and 7 provide a report of 24 hour TSP and PM10 exceedances compared against the assessment criteria.

It is noted that the northern monitor is not located on the northern residential boundary so that exceedance results are considered conservative.

An EPA audit was undertaken at the Port Kembla Coal Terminal (PKCT) rail unloading facility on 30th May 2014.

The scope of the audit was an inspection of the activities undertaken at PKCT related to minimising or preventing the loss of coal in the form of spills, leaks and dust emissions during rail transport. The EPA inspected the unloading process in the rail receival shed and the associated maintenance and procedural documentation.

It is noted that this audit was part of a broader compliance audit program involving 15 sites in Newcastle and the Illawarra.

The EPA's final audit report identified a single non-compliance against EPL condition O1.1. The finding related to an observation of fine coal dust particles on wagon surfaces and coarse coal particles and lumps of coal on wagon bogies.

PKCT has proposed an action plan to rectify the issues identified in the audit finding.

2.3 METEOROLOGICAL MONITORING

2.3.1 Assessment Criteria

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

2.3.2 Monitoring and Results

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

 Northern and southern continuous dust monitors are calibrated annually and measure PM10, PM2.5, TSP, wind speed and wind direction.

Interim Environmental Management Report



Management Plan

Page 10 of 34

- PKCT also has an anemometer on the Main Control Tower. It measures wind speed and direction as well as rainfall, pressure, temperature and humidity.
- Summary data is provided in Attachment "H".

2.4 SURFACE WATER

2.4.1 Assessment Criteria

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

PKCT completed a five-yearly EPL review with the EPA in September 2014. Updated licence conditions related to water quality data are presented below.

EPL 1625 Water Quality Limits

Pollutant	Unit of	100 Percentile	Limits following September
	Measure	Concentration Limit	2014 EPL Review
Oil and Grease	Milligrams per litre	10	Not visible
рН	рН	6.5-8.5	Monitoring and reporting only
Total Suspended Solids (TSS)	Milligrams per litre	50	50

Exceeding the limit specified in Condition L2.4 of this licence for Total Suspended Solids for discharges from Point 16 identified by Conditions P1.2 and P1.3 is only permitted when the discharge occurs solely as a result of rainfall measured at the premises. For discharge to be considered to occur solely as a result of rainfall, the rainfall must exceed a 5 day rainfall depth value of 90 mm over a consecutive 5 day period.

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&E Approval 08_0009 Water Quality Condition

SURFACE WATER

Discharge Limits

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

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

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

This is a Controlled Document in SharePoint Controlled Documents Library

Interim Environmental Management Report



Management Plan

Page 11 of 34

2.4.2 Monitoring and Results

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

Attachment "I" provides data on potable and recycled water usage. Potable water usage across the reporting period has been variable but overall has increased compared to the same period last year. The same trend has been observed for Recycled water. The increase in potable water use is a result of intermittent supply issues of recycled water and hot, dry weather events. PKCT is currently reviewing its water supply infrastructure and investigating ways of reducing water use across the site.

Attachment "K" provides water quality results from PKCT's EPL Licensed Discharge Point 16 (LDP16). The results indicate the following:

- (a) 100% compliance for Oil and Grease.
- (b) pH remained an EPL licensed parameter up until 16th September 2014. Prior to its removal, there were three instances where pH was marginally above the upper limit of 9.5. These instances occurred on 11th, 12th and 14th of August 2014. The period of discharge associated with these instances occurred as a result of lowering the Lagoon to undertake emergency repairs to the Lagoon overflow weir after a pinhole leak was identified during routine monitoring.
- (c) There were three overflow instances within the reporting period where TSS was marginally above the EPL TSS limit of 50mg/L. These instances occurred on 14th August 2014, 18th November 2014 and 20th November 2014. Additional field monitoring and microscopic analysis of samples at a specialist Coal Petrology laboratory during these overflow events has identified that algae is adversely influencing the measured TSS levels within the overflow samples. The results have also confirmed the effectiveness of the dosing system as a reliable method of removing coal fines prior to discharge. The table below shows the analysis results for each of the instances where TSS was greater than 50mg/L.

Date	TSS (mg/L)	% of Soil and Coke in Sample	% of Soil, Minerals, Clays etc. in Sample	% of Insect and Plant Remains in Sample
14/08/2014	77	<1%	<1%	>95%
18/11/2014	69	10 to 20%	15 to 20%	60 to 70%
20/11/2014	52	20 to 30%	5 to 10%	60 to 70%

Following a significant storm event on the 24th March 2014, two discharges occurred from LDP16 which exceeded EPL limits for total suspended solids. The event was reported to the EPA at the time and an incident report was submitted. PKCT received a Formal Warning for

Interim Environmental Management Report



Management Plan

Page 12 of 34

this event from the EPA during this reporting IEMR reporting period on 25th July 2014. Details relating to this event were reported in the 2013/2014 Annual Environmental Management Report (AEMR).

On 5th June 2014 during a storm event, a small pit connected to the C9 pump briefly overflowed to Port Kembla Harbour. The investigation following the event identified that a float switch had failed to engage and initiate the pump. The event was reported to the EPA at the time. During this reporting period on 18th September 2014, PKCT received an Official Caution for the event. Further information on this event was reported in the 2013/2014 AFMR.

2.5 BIODIVERSITY

2.5.1 Assessment Criteria

Green and Golden Bell Frog Management Plan

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

Objective	PKCT Commitment	
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.	

2.5.2 Monitoring and Results

PKCT has a Green and Golden Bell Frog (GGBF) management plan in place. Internal and external (with consultant) surveys are undertaken periodically by PKCT. PKCT's consultant, Biosphere, undertook a review of PKCT's management plan in July 2011. Site inspections associated with the review failed to detect any GGBF on site, any signs of tadpole activity or croaking. The management plan has been reviewed and submitted to the Environment Protection Authority. Opportunities to further develop Greenhouse Park frog habitat are under consideration. PKCT undertook its latest frog survey in February 2015. During this survey, no Green and Golden Bell frogs were sighted or heard.

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

Interim Environmental Management Report



Management Plan

Page 13 of 34

2.6 GREENHOUSE & ENERGY EFFICIENCY

2.6.1 Assessment Criteria

Operating Conditions

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

Greenhouse and Energy Efficiency Plan

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

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

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

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

Interim Environmental Management Report



Management Plan

Page 14 of 34

2.6.2 Monitoring and Results GHG & Energy Efficiency

Neither EPL 1625 nor DP&E Approval 08_0009 specifies criteria for GHG emissions or energy reduction. Attachment "L" and "M" provide data covering the 2014/2015 reporting period. It is noted that Greenhouse Gases - Scope 1 and Scope 2 emissions are below the National Greenhouse and Energy Reporting (NGER) scheme reporting threshold.

Energy Efficiency - The data indicates that energy efficiency has generally been good YTD with three of six months below the energy efficiency target of 1.655. Three months - July, August and October 2014 - were above the kWh/tonne efficiency target and have therefore decreased the yearly average energy efficiency for the YTD. Energy efficiency is calculated by dividing kilowatt hours consumed by tonnes of throughput. The results measured during July, August and October are directly related to low throughput during these months. Opportunities are being continually sought to improve efficiency through proposed plant/equipment replacements and upgrades.

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

2.7 WASTE

2.7.1 Assessment Criteria

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

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

Operating Conditions

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

Interim Environmental Management Report



Management Plan

Page 15 of 34

2.7.2 Monitoring and Results

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

Waste Data available for the reporting period is presented in Appendix N.

2.8 HAZARDS

2.8.1 Assessment Criteria

Dangerous Goods

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

2.8.2 Monitoring and Results

PKCT decommissioned its two underground fuel storage tanks in February 2014. PKCT continues to utilise a mobile refueling system for its plant machinery and no longer stores any fuel on site.

3 COMMUNITY RELATIONS

3.1 ASSESSMENT CRITERIA

Appendix 2- Statement of Commitments	PKCT 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.

3.2 Monitoring and Results

Complaints received during the reporting period entail the following:

- (a) No complaints related to PKCT general operations were received during the reporting period.
- (b) One complaint related to road transport.

On 18th December 2014, a complaint was received from a community member noting coal trucks parking near the bottom of Mt Ousley Road. The involved truck company was asked to direct its drivers to cease parking in the area along with a general reminder to all transport companies not to park in the area. The community member was notified of the outcomes of the investigation.

Interim Environmental Management Report



Management Plan

Page 16 of 34

The following actions occurred during the reporting period:

- Community Consultative Committee met on 13th August and 3rd December 2014.
- PKCT web site (<u>www.pkct.com.au</u>) continues to include e-mail and phone contact details (<u>communitylinks@pkct.com.au</u>).
- PKCT website was updated to include details of the PKCT Community Consultative Committee.

4 INDEPENDENT EXTERNAL AUDIT 2014- STATUS OF ACTIONS

An audit was carried out by consultant, AECOM P/L, in March 2014 and an audit report was submitted to the DP&E on 9th May 2014.

By email on 29th May 2014, DP&E provided a response to the audit submission raising a number of matters requiring PKCT's attention. PKCT sought to address these matters and by email of 10th June 2014, PKCT submitted a revised audit report together with a requested Action Plan.

On the 16th June 2014, the DP&E provided further feedback and PKCT revised its Action Plan and Audit Report to accommodate the requests of the DP&E.

A summary of the status of the minor Non-Compliances identified in the audit is presented below;

- The auditors identified a dust deposition funnel was not in a gauge located along the Seawall Road as a result of public tampering with the gauge. The auditors recommended installing a locked gate at this location to minimise the likelihood of this reoccurring. A locked enclosure was installed around the two Seawall Road Dust Gauges in December 2014.
- Occasional pH and TSS exceedances have occurred at PKCT's LDP16. The audit
 identified the exceedances as a minor non-compliance. During the reporting period,
 PKCT has been working through a number of initiatives to reduce the likelihood of
 further exceedances. These initiatives include;
 - Gaining funding and beginning major upgrade works at the site's Central Pond.
 - Installation of a controlled discharge pipe to assist with water management at LDP16.
 - Engaging a consultant to undertake a review of a TSS exceedance event to understand the mechanism causing the exceedance.
 - Investigating alternate emergency water clarification methods.
 - Reviewing the cleaning process in the Settlement Lagoon.

Interim Environmental Management Report



Management Plan

Page 17 of 34

5 CONCLUSION

Monitoring undertaken during the reporting period did not identify any notable adverse aspects. Further work to be finalised will be reported in the Annual Environmental Management Report due on 31^{st} July 2015.

6 REFERENCES

Environmental Protection Licence 1625 – Port Kembla Coal Terminal

Major Project Approval 08 0009 for the Port Kembla Coal Terminal Project

Page 18 of 34

Attachment A. Noise Monitoring Report - December 2014

Port Kembla Coal Terminal December 2014 Compliance Monitoring

Page 12 Report No. 07355-NM-10 Version A

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

			BarnOwl® La	BarnOwl® L _{Aeq} (dBA)		Wind Speed			
Date & Start Time	Period	Criteria (dBA)	PKCT Direction [Est. PKCT Contribution]	All Noise	L _{A90}	(m/s) and Direction	Stability Class	Y Compliance	Observations
17/12/14 5.00-5.15pm	Day	51	36 [<25]	59	52	3.0-3.3 154-156°	C	YES Not Audible =	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible.
5.00-5.15pm			[<25]			134-136		Not Audible	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 7
17/12/14 6.55-7.10pm	Evening	50	44 [<25]	64	47	2.8-3.5 157-167°	D	YES Not Audible =	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible.
0.55-7.10pm			[~23]			137-107		Not Audible	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 6
17/12/14 10.00-10.15pm	Night	49	33 [<25]	55	41	0.7-1.3 141-216°	D/E	YES Not Audible	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible. Trucks barely audible on access road
								-	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 11
17/12/14 10.15-10.30pm	Night	49	30 [<25]	51	41	1.3-1.9 216-273°	E/F	YES Not Audible	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible. Trucks barely audible on access road
									On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 10

WILKINSON ((MURRAY

Port Kembla Coal Terminal December 2014 Compliance Monitoring Page 13 Report No. 07355-NM-10 Version A

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

			BarnOwl® La	eq (dBA)	- SLM	Wind Speed			
Date & Start Time	Period	Criteria (dBA)	PKCT Direction [Est. PKCT Contribution]	All Noise	L _{A90} (dBA)	(m/s) and Direction	Stability Class	Compliance	Observations
17/12/14 5.25-5.40pm	Day	51	42 [<25]	68	51	3.1-3.8 156-167°	С	YES Not Audible =	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible.
5.25-5.40pm			[<25]			150-167		Not Audible	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 7
17/12/14 6.30-6.45pm	Evening	50	41 [<25]	58	49	2.7-3.1 143-147°	D	YES Not Audible	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible.
6.30-6.43pm			[<25]			143-14/			On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 6
17/12/14 10.40-10.55pm	Night	49	40 [<25]	60	42	2.0-2.2 252-259°	D/E	YES Not Audible	At residential location: Noise dominated by road traffic and local activities PKCT activities not audible. Trucks barely audible on access road
								_	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 5
17/12/14 10.55-11.10pm	Night	49	43 [<25]	54	41	1.8-2.0 252-264°	D/E	YES Not Audible	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible. Trucks barely audible on access road
								On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 6	

WILKINSON ((MURRAY



Page 19 of 34

Attachment "A" Noise Monitoring Report - December 2014 (continued)

Port Kembla Coal Terminal December 2014 Compliance Monitoring

Page 14 Report No. 07355-NM-10 Version A

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

			BarnOwl® Laeq (dBA)		- SLM	Wind Speed			
Date & Start Time	Period	Criteria (dBA)	PKCT Direction [Est. PKCT Contribution]	All Noise	L _{A90} (dBA)	(m/s) and Direction	Stability nd Class	Compliance	Observations
17/12/14 5.45-6.00pm	Day	55	38 [<25]	64	52	3.0-3.3 156-157°	C	YES Not Audible =	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible.
3.43-0.00рш			[\25]			130-137-		Not Addible	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 6
17/12/14	Evening	49	40	63	51	3.0-3.6	с	YES	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible.
6.05-6.20pm		[<20] 148-157º Not Ai	Not Audible -	On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 8					
17/12/14 11.20-11.35pm	Night	45	33 [<20]	54	40	2.1-2.3 256-261°	D	YES Not Audible	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible. Trucks barely audible on access road
									On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 7
17/12/14 11.35-11.50pm	Night	45	32 [<20]	57	41	2.2-2.3 256-259°	D/E	YES Not Audible	At residential location: Noise dominated by road traffic and local activities. PKCT activities not audible. Trucks barely audible on access road
									On-site: Noise dominated by truck movements and unloading. Number of trucks entering: 5



Interim Environmental Management Report



Management Plan

Page 20 of 34

Attachment B. SUMMARY OF PKCT THROUGHPUT AND RECEIVALS

Shiploading and Receivals: July- December 2014

Shinlanding July to December 2014	Coal		Coke	Iron Ore	Total
Shiploading July to December 2014	Coking	Steaming	Coke	Iron Ore	Iotai
Berth 101: Bulk Products Berth (Tonnes)		0	2,345	.51	2,345
Berth 102: Coal Berth (Tonnes)	4,283,849	2,708,428	0	0	6,992,277
·	- 35-		Total (tonne	es)	6,994,622

Receivals July to December 2014	Private and Public Road		
Road Receival (Tonnes)	3,764,873		
Rail Receival (Tonnes)	3,344,180		
Total Tonnes	7,109,053		

Interim Environmental Management Report



Management Plan

Page 21 of 34

Attachment C. ROAD TRANSPORT COMPLAINTS & INCIDENTS SUMMARY

Incidents: July-December 2014

	Incident Summary July to December 2014						
Company	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	į.
Bulktrans	0	1	0	1	0	0	8
Brindles	0	0	0	0	0	0	ž.
Trazblend	0	0	0	0	0	0	Tota
Total	. 0	. 1	0	. 1	0	. 0	2

Incident Summary	
August - Empty truck collision with stationary tilt tray	
October - Car ran into back of loaded truck coming down Mt Ousley	

Note: Data not available for Bulktrans for Nov and Dec



Page 22 of 34

Management Plan

Attachment D. ROAD TRANSPORT REPORT- JULY-DECEMBER 2014

Monthly Reports Summary FY 14/15	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	FY14/15 Total	Comment
Tonnes - Public Road	387,563	319,312	328,331	399,061				Note: Some data not available to
Tonnes - Private Road	192,083	176,846	213,537	291,988	717,538	738,614	3,764,874	separate private and public tonnes for Nov and Dec.
Total road tonnes	579,646	496,158	541,868	691,049				
Spillage - Public Road	0	0	0	0	0	0	0	
Incident - Other	0	0	0	0	0	0	0	
Impact with other vehicle	0	1	0	1	0	0	2	
Incidents Reported to RTA	0	2	0	0	0	0	2	
Complaints	0	1	2	0	0	1	4	
EPL/ regulatory breaches	0	0	0	0	0	1	1	
Inductions (%)	100	100	100	100	100	100		
Hours restrictions breach	0	0	0	0	0	0	0	, and the second
Road Transport Providers (RTP): Observations/ Audits	108	94	69	63	35	29	398	Note: Does not include Bulktrans data in Nov or Dec
RTP: Number of drivers observed	659	682	651	577	35	29	2,633	Note: Does not include Bulktrans data in Nov or Dec
RTP: Trucksafe/NHVAS/Other Audits	50	70	68	55	1	1	245	Note: Does not include Bulktrans data in Nov or Dec
CTO / Audits at mine sites (Shippers & PKCT)	0	0	0	0	0	0	0	
CTO / Audits: At PKCT (Shippers & PKCT)	4	4	1	3	4	3	19	* Data supplied by Illawarra Coal not month specific
CTO / Audits: Mine to PKCT (Shippers & PKCT)	2	1	1	0	0	0	4	
RTP system audits	0	0	0	0	0	0	0	Includes data from Shippers and Road Transport Provider's



Management Plan

Page 23 of 34

Attachment E. AIR QUALITY- MONITORING SITES



Location of EPL Air Quality Monitoring Sites

Dust Gauges- EPA EPL sites

Bluescope High Volume Sampler/ EPA EPL P11

Continuous Dust Monitor Sites

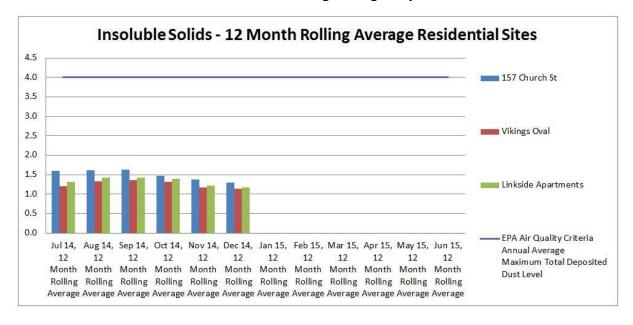
PKCT Site Boundary

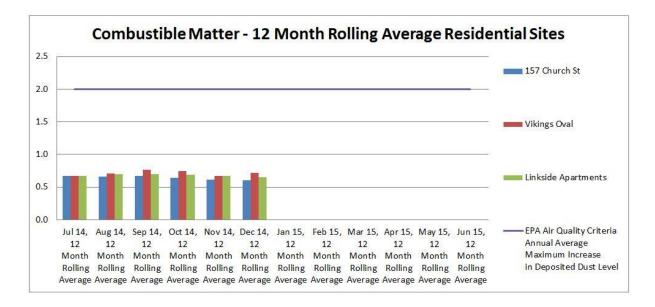


Page 24 of 34

Attachment F. AIR QUALITY: DUST DEPOSITION

Residential Sites - 12 month rolling average July to December 2014







Page 25 of 34

Attachment G. AIR QUALITY: CONTINUOUS DUST DATA

July- December 2014

Table 6 Maximum recorded 24-hour average TSP concentrations at the northern PKCT monitoring site during July to December 2014 by month (trigger level of 90 μg/m³)

Monitoring period	Maximum concentration (µg/m³)	Number of exceedances
July 2014	28.0	0
August 2014	50.6	0
September 2014	74.3	0
October 2014	144.7	4
November 2014	160.4	7
December 2014	176.5	14
	Total exceedances	25

Table 7 Maximum recorded 24-hour average PM₁₀ concentrations at the northern PKCT monitoring site during July to December 2014 by month (air quality standard of 50 µg/m³)

Monitoring period	Maximum concentration (µg/m³)	Number of exceedances
July 2014	17.8	0
August 2014	36.1	0
September 2014	38.9	0
October 2014	102.8	8
November 2014	108.1	13
December 2014	124.3	21
	Total exceedances	42

Table 8 Annual average TSP and PM₁₀ concentrations at the northern PKCT monitoring site during July to December 2014

Pollutant	Standard/ trigger level (µg/m³)	Rolling annual average January – December 2014 (µg/m³)	Six-month average July – December 2014 (µg/m³)
TSP	90	45.6	47.5
PM ₁₀	30	28.3	32.1



Page 26 of 34

Attachment "G" Air Quality: Continuous Dust Data (continued)

Table 9 PKCT contribution ratings for exceedance days during July to December 2014

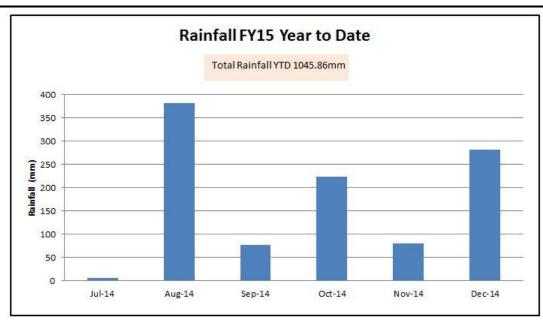
PKCT contribution rating	Number of TSP exceedance days	Number of PM ₁₀ exceedance days
None	4	8
Minimal (0% to 10%)	10	15
Minor (10% to 30%)	9	14
Moderate (30% to 70%)	1	3
Major (70% to 100%)	0	0
Unclassified (missing data)	1	2
Total exceedance days	25	42



Management Plan

Page 27 of 34

Attachment H. Weather Monitoring Summary- July- December 2014



The July to December 2014 period has seen relatively wet conditions with significant rainfall events in August, October and December. Total rainfall for the same period last year was 685.77mm. Rainfall experienced across the period was typically heavy downpours followed by long periods of relatively dry conditions.



Management Plan

Page 28 of 34

Attachment "H"- Weather Monitoring Summary- July- December 2014 (continued)

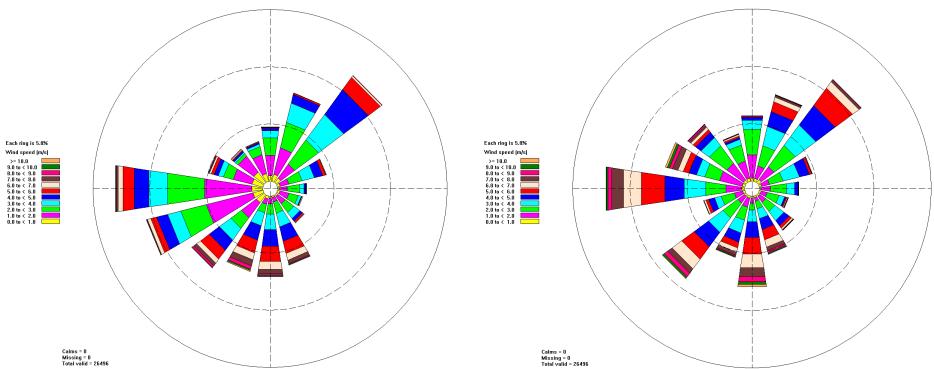
Date	Rainfall (mm)	Maximum Temperature (deg C)	Maximum Wind Speed (m/sec)	Average Wind Speed (m/sec)	
Jul-14	4.95	24.7	26.0	5.8	
Aug-14	380.75	21.9	26.9	5.5	
Sep-14	76.54	32.6	24.1	5.7	
Oct-14	222.54	31.3	33.6	5.3	
Nov-14	79.43	33.7	29.3	5.3	
Dec-14	281.65	30.4	22.9	5.1	



Page 29 of 34

Wind Rose - Monitors C1 &C2 (refer Attachment "E" for locations)

North Rose July to December 2014 South Rose July to December 2014



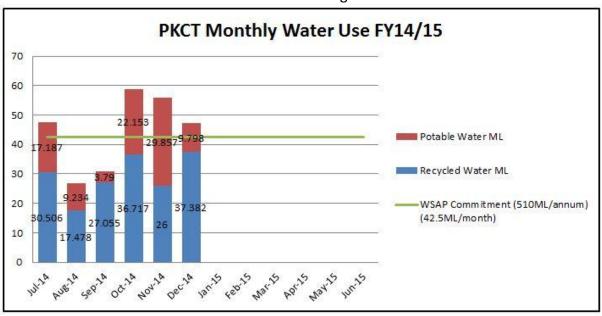


Management Plan

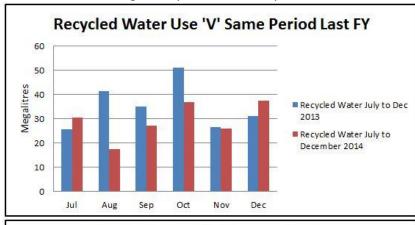
Page 30 of 34

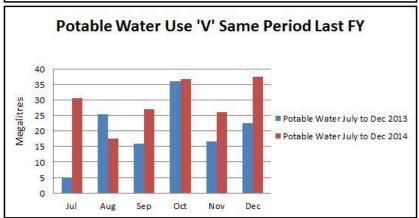
Attachment I. WATER USAGE REPORT

YTD water usage



Water usage compared to same period last FY





Interim Environmental Management Report



Management Plan

Page 31 of 34

Attachment J. Settlement Lagoon Discharges: July-December 2014

-						ICENCE MONITORING: POINT 16
Environment Protection Licence: 1625 Type of Monitoring: water quality		water quality parameter		EPL Limit (100 percentile)		
				pH	monitoring only	
requency: daily grab sample when discharging		total suspended solids oil/ grease (milligrams per litre)		less than 50 not visible		
		-	olir grease i		not visible	
Sample Date	Date Results Obtained	Date Published	pH (pH units)	total suspended solids (milligrams per litre)	oil/ grease (milligrams per litre)	Commentary on Results
01/07/2014	04/08/2014	11/08/2014	7.9	<5	<5	EPL compliant
09/07/2014	04/08/2014	11/08/2014	9.1	<5	<5	EPL compliant
10/07/2014	04/08/2014	11/08/2014	9.2	<5	<5	EPL compliant
11/08/2014	08/09/2014	09/09/2014	9.6	33	<5	Period of controlled dewatering to facilitate emergency repair in overflow weir. pH marginally outside limits due to algae in Lagoon. TSS analysed b external lab and confirmed to be algal matter, not coal fines.
12/08/2014	08/09/2014	09/09/2014	9.7	34	<5	0790
13/08/2014	08/09/2014	09/09/2014	9.4	<5	<5	EPL compliant
14/08/2014	08/09/2014	09/09/2014	9.6	77	₹5	Period of controlled dewatering to facilitate emergency repair in overflow weir. pH marginally outside limits due to algae in Lagoon. TSS analysed b external lab and confirmed to be algal matter, not coal fines.
15/08/2014	08/09/2014	09/09/2014	9.4	19	<5	EPL compliant
17/08/2014	08/09/2014	09/09/2014	8.3	7	<5	EPL compliant
18/08/2014	08/09/2014	09/09/2014	7.9	<5	<5	EPL compliant
19/08/2014	08/09/2014	09/09/2014	7.5	₹5	<5	EPL compliant
20/08/2014	08/09/2014	09/09/2014	7.2	12	<5	EPL compliant
22/08/2014	08/09/2014	09/09/2014	7	₹5	<5	EPL compliant
23/08/2014	08/09/2014	09/09/2014	7	₹5	<5	EPL compliant
25/08/2014	08/09/2014	09/09/2014	6.7	6	<5	EPL compliant
26/08/2014	08/09/2014	09/09/2014	6.7	<5	<5	EPL compliant
27/08/2014	08/09/2014	09/09/2014	7.1	√ 5	< 5	EPL compliant
28/08/2014	08/09/2014	09/09/2014	8.2	₹5	< 5	EPL compliant
03/09/2014	15/10/2014	22/10/2014	7.7	10	< 5	EPL compliant
08/09/2014	15/10/2014	22/10/2014	6.9	9	<5	EPL compliant
08/10/2014	14/11/2014	18/11/2014	10.0	35	< 5	EPL compliant
14/10/2014	14/11/2014	18/11/2014	9.2	31	<5	EPL compliant
15/10/2014	14/11/2014	18/11/2014	9.2	22	< 5	EPL compliant
16/10/2014	14/11/2014	18/11/2014	6.8	10	₹5	EPL compliant
17/10/2014	14/11/2014	18/11/2014	6.9	₹5	<5	EPL compliant
01/11/2014	15/12/2014	18/12/2014	9.6	10	₹5	EPL compliant
02/11/2014	15/12/2014	18/12/2014	9.4	8	< 5	EPL compliant
12/11/2014	15/12/2014	18/12/2014	9.7	31	BROKENBOTTLE	EPL compliant
15/11/2014	15/12/2014	18/12/2014	9.2	27	<5	EPL compliant
17/11/2014	15/12/2014	18/12/2014	9.0	47	<5	EPL compliant
18/11/2014	15/12/2014	18/12/2014	9.8	69	<5	TSS analysed by external lab found algal matter contributed 60-70% of matter, further investigation is underway.
19/11/2014	15/12/2014	18/12/2014	9.9	23	<5	EPL compliant
20/11/2014	15/12/2014	18/12/2014	9.9	52	<5	TSS analysed by external lab found algal matter contributed 60-70% of matter, further investigation is underway.
27/11/2014	15/12/2014	18/12/2014	8.7	16	<5	EPL compliant
28/11/2014	15/12/2014	18/12/2014	8.3	13	<5	EPL compliant
02/12/2014	12/01/2015	13/01/2015	8.7	18	<5	EPL compliant
03/12/2014	12/01/2015	13/01/2015	8.8	27	<5	EPL compliant
04/12/2014	12/01/2015	13/01/2015	7.7	17	<5	EPL compliant
05/12/2014	12/01/2015	13/01/2015	8	6	<5	EPL compliant
06/12/2014	12/01/2015	13/01/2015	7.5	10	<5	EPL compliant
07/12/2014	12/01/2015	13/01/2015	7.3	<5	<5	EPL compliant
10/12/2014	12/01/2015	13/01/2015	7.3	<5	<5	EPL compliant
11/12/2014	12/01/2015	13/01/2015	7.5	<5	<5	EPL compliant
12/12/2014	12/01/2015	13/01/2015	7.2	<5	<5	EPL compliant
15/12/2014	12/01/2015	13/01/2015	7.6	<5	<5	EPL compliant
16/12/2014	12/01/2015	13/01/2015	8.6	<5	<5	EPL compliant
17/12/2014	12/01/2015	13/01/2015	9.0	14	<5	EPL compliant
29/12/2014	12/01/2015	13/01/2015	9.3	20	<5	EPL compliant
30/12/2014	12/01/2015	13/01/2015	9.3	20	<5	EPL compliant

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

Interim Environmental Management Report



Management Plan

Page 32 of 34

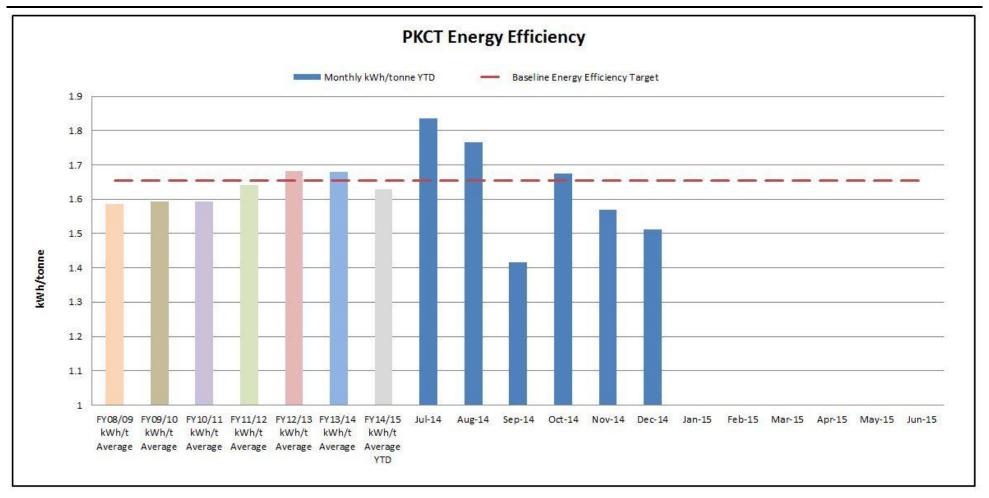
Attachment K. Greenhouse Gas Report- July- December 2014

2014/2015 FY		A	В	С	D	E
(July-Dec)		Amount			Gigajoules	tonnes Reportable
	Reporting	consumed	Energy content (GJ	Emissions factor	Reportable	emissions (tonnes
	unit	(reporting unit)	per reporting unit)	(kg CO2-e per GJ)	energy (GJ)	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	34	30.88	69.51	1043	73
Petrol (transport)	kL	8	34.20	69.60	286	20
Petroleum based oils	kL	2	38.80	27.90	67	2
Petroleum based greases	kL	2.91	38.80	27.90	113	3
Acetylene	m3 *	21	0.0393	51.33	1	0
Scope 2 – indirect emissions	i ż					
	Reporting		Energy content (GJ	Emissions factor		
	unit		per kWh)	(kg CO2-e per kWh)		
Electricity	kWh	11,294,346	0.0036	0.89	40660	10052
Tota	i				42169	10149
Threshold	**				100,000	25,000



Page 33 of 34

Attachment L. ENERGY EFFICIENCY YTD





Management Plan

Page 34 of 34

Attachment M. WASTE REPORT JULY-DECEMBER 2014

Waste Volumes	July 2014 to December 2014		
General Waste	46949.5	kg	Landfill
Metal	44567	kg	Recycled
Cardboard Recycling	2556	kg	Recycled
Waste Rags	1680	L	Recycled
Waste Grease Cartridges	480	L	Recycled
Waste Oil Filters	480	L	Recycled
Waste Pressure Packs	720	L	Recycled
J120 Waste (oil and hydrocarbons mixed with water)	26400	L	Off Site Treatment