Port Kembla Coal Terminal (PKCT) Approval 08_0009

Department of Planning Industry and Environment (DPI&E) – Independent External Audit 5th August 2020

On 4th and 5th August 2020, Environmental Resources Management Australia Pty Ltd (ERM) undertook a Triennial Independent Environmental Audit at Port Kembla Coal Terminal as per the requirements of Project Approval 08_0009. By letter dated 26th March 2020, PKCT requested of the DPI&E that the Audit Report submission date be extended to the 30th September 2020 due to escalation of the COVID-19 Pandemic, associated border closures and social distancing directives. This request was approved by DPI&E by letter dated 21st April 2020.

As per Schedule 4, Condition 6, of Approval 08_0009 the tables below represent PKCT's formal response (Action Plan) to the recommendations outlined in the submitted Audit Report.

The tables below are presented in the same format to those contained in the Audit Report with PKCT's Response to each finding outlined within the last column to the right of the table.

Each of the findings below will be given a unique identification number managed through PKCT's Event Management System.

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Minist	er's Conditions of Approval PA 08_0009				
2.9	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.	Evidence was sighted that management plans are routinely reviewed, updated and submitted to the Department for approval, however the Department has not responded to the submitted management plans or provided approval for the updates. PKCT has been operating under the updated management plans despite the plans not receiving approval from the Department.	NC	Confirm the status of previously submitted management plans with DPIE.	Finding accepted NC-2020_001 — PKCT will formally contact DPI&E and confirm status of previously submitted Management Plans. PKCT will assume that the Dept. accepts the plans until such time as formal notification is received from the Dept. Completion by;

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					31 st October 2020
3.3	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.	In 2017, PKCT committed to investigating the hanging metal tubes in the northern truck-wash to assess whether noise levels may be problematic and adding checks for operating vehicles to the internal audit worksheet to minimise noise. The outcome of this investigation and confirmation of the changes to the audit worksheet were not included in subsequent AEMRs. Site management reported that the hanging metal tubes were not investigated during the audit period due to alternative monitoring systems being considered which would include removal of the hanging metal tubes. An alternative monitoring mechanism was not in place at the time of the audit.	NC	PKCT to report on the outcome of the hanging metal tubes investigation and internal worksheet updates in the AEMRs.	NC-2020_002 – PKCT had intended to implement a project where the metal tubes would be removed. This project has been placed on hold. PKCT has not received any noise complaints associated with the Project as a whole, nor with the hanging metal tubes. Based on this finding, PKCT will engage a noise consultant to review potential noise associated with the hanging metal tubes and recommend actions. Completion by; 10 th March 2021
3.7	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.	PKCT monitors residential dust at three locations, with 11 additional monitoring points throughout the site to assist with dust management practices. According	C(Obs)	The Air Quality Management Plan and Monitoring Program is currently	Finding accepted Obs-2020_001 - PKCT will update
	Table 3: Long term impact assessment criteria for particulate matter	to the AEMRs, there were no instances of exceedances of the criteria at any of		version 3 (according to the version history	the document to correctly state the

		Assessment Requirem	ent	Comment	Audit Class.	Response/Action	PKCT Response/Action
Total sus particula Particula μm (PM1 Table 4:	ollutant pended te (TSP) matter te matter < 10 0) Short term im ollutant te matter < 10 0) Long term im ant Average	Averaging period Annual Annual Annual Pact assessment criter Averaging period 24 hour Pact assessment criter apact assessment criter apac	d Criterion a 90 μg/m3 a 30 μg/m3 ia for particulate matter d Criterion a 50 μg/m3	the residential locations. The AEMRs for the audit period reported one month where the criteria were exceeded at one of the 11 industrial gauges, in March 2017. However, there was no associated exceedance reported at any of the residential gauges. Exceedances of the short term criteria were reported on 115 occasions during the audit period (43 in 2016/2017, 44 in 2017/2018 and 28 in 2018/2019). Of these exceedances, PKCT was assessed as having made either no, minimal or minor contributions to the results (i.e. <30%) for 107 events. Of the remaining 8 events, PKCT was assessed as having contributed a moderate amount (30% to 70%) on four occasions and the remaining four were unable to be assessed. PKCT was not assessed as being a major contributor (70% - 100%) to the results for any		table) dated 20 th July 2020 while the document header states the version as 12.0 and the footer states the document authorisation date as 9 th October 2017. The document requires updating to correctly state the current version.	
Standard and Ana Matter - However agreeme 3, 4 and/ Departm	Is Australia, of Ambie Gravimetric M., if the Propor nt with any later 5, and a coent and DECO	1991, AS 3580.10.1-19 Int Air - Determination of Dethod. The has a written negoundowner to exceed the Depty of this agreement has	air quality limits in Table as been forwarded to the nay exceed the air limits	between 2% and 10% on days where exceedances were reported. Given that the only reported exceedances occurred on days where			

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	agreement.				
3.12	Except as may be expressly provided in an EPL for the project, the Proponent shall comply with Section 120 of the <i>Protection of the Environment Operations Act 1997</i> .	PKCT has been operating generally in compliance with Section 120 of the <i>Protection of the Environment Operations Act 1997</i> with the exception of events identified within this audit, including reported water quality exceedances during discharge events. ERM have therefore assessed PKCT as non-compliant with this condition. Specific instances of non-compliance are addressed throughout this report.	NC	Refer to specific conditions.	Finding accepted. NC-2020_003 — PKCT accepts the findings of noncompliance associated with this finding occurred as a result of specific events that occurred during the reporting period. For each of the events, PKCT has implemented remedial measures to limit the potential of future occurrences. PKCT continues to operate in line with its approved Policies, Procedures and Management
					and Management Plans. PKCT continues to maintain accreditation to ISO14001 and ISO9001. The events and associated actions have been reported
					to, and closed off by the EPA. PKCT does not propose any further actions associated with this

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					non-compliance. Action Status:
3.15	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.	Previous IEAs have reported that an external consultant reviewed site lighting in 2011 and reported that PKCT was compliant with AS 4282. The 2018 - 2019 AEMR reported that a major restoration project had been completed including ensuring all new lighting complies with AS 4282 and using LED lighting and ensure lighting emissions are either local to access and stairway areas or elevated and directed towards the ground or stockpiles. ERM reviewed an audit report titled Port Kembla Coal Terminal External Lighting Audit, AS/NZS 4282 Control of the Obtrusive Effects of Outdoor Lighting dated 16th March 2020. The audit concluded any report detailing that lighting is in accordance with AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting with the exception of the Bulk Products Area, which should be upgraded as part of the next scheduled maintenance for those lights. ERM reviewed the community complaints register which confirmed that there were no complaints related to lighting during the audit period.	NC	Upgrade the lighting in the Bulk Products Area to Type C or D as recommended by the 2020 External Lighting Audit.	Completed 9th September 2020. Finding accepted. NC-2020_004 — Lights in the Bulk Products area are changed out on failure rather than on a defined schedule. PKCT will adjust the angle of the lights in the area on a progressive basis to ensure compliance with the AS. PKCT's maintenance schedule will be updated to include this requirement. Completion by; 31st December 2020.

Item Assessment Requir	ement		Comment	Audit Class.	Response/Action	PKCT Response/Action
The Proponent shall prepare and impleme Management Strategy for the project to the General. This strategy must: (a) be submitted to the Director-General for this project approval or otherwise agree (b) provide for the strategic context for the of the project; (c) identify the statutory requirements that (d) describe the procedures that would be • keep the local community informed about the opera performance of the project; • receive, handle, respond to, a • resolve any disputes that may the project; • respond to any non-compliance • manage cumulative impacts; a • respond to emergencies; (e) include an environmental monitoring princludes all the monitoring requirements of (f) describe how the various incident and a requirements of the project would be integ system; and (g) describe the role, responsibility, author the key personnel involved in the environn project.	or approval within 12 months of by the Director-General; environmental management apply to the project; implemented to: and relevant agencies ation and environmental and record complaints; arise during the course of the ce; and reproval; approval reporting rated into a single reporting ity and accountability of all	Environ	perates under the PKCT mental Management Strategy Version 13.0, last updated on 72020. The development application was approved in 2009 and the EMS is now in Version 13.0. It is unclear whether the EMS was first submitted within 12 months of approval, however given the 12 month submittal period falls outside the audit period it has not been raised as a finding. The strategic context is presented in Section 5.0 Statutory requirements are presented in Section 6.0 Systems to keep the local community and relevant agencies informed are presented in Section 11. Procedures to respond to noncompliance and manage cumulative impacts are presented in Section 7.0 and emergency response procedures are presented in Section 7.0 and emergency response procedures are presented in Section 7.0 and emergency response procedures are presented in Section 7.0 and emergency response procedures are presented in Section 7.0 and emergency response procedures are presented in Section 8.1. The environmental monitoring requirements from this approval (traffic, received quantities, noise, dust,	C(Obs)	Note: ERM recommends removing Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008 from the Section 6.3 list of Acts and Regulations as there are no longer underground petroleum storage systems present at the site. Note: ERM recommends removing reference to EIP U3 as this program has been terminated.	Pinding accepted. Obs-2020_002 - PKCT has updated the Environmental Management Strategy to Version 15. Changes have been made as per audit suggestions. Reference to EIP U3 has been removed as well as removing reference to Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008 from Section 6.3. Action Status: Completed 9th September 2020.

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		meteorology, surface water, biodiversity, greenhouse gas emissions and waste) and is presented in Section 9.0. f) A comprehensive reporting framework is presented in Section 9.0. g) Key personnel roles and responsibilities are described in Section 4.0.			
		Implementation			
		PKCT maintains regular correspondence with the local community via the community consultative committee and relevant agencies via routine reporting through AEMRs, Annual Returns and Management Plan submissions and on an as needed basis by self-reporting environmental incidents to the regulator. ERM received a response from one Community Consultative Committee member, Barry, who reported that he had no concerns at the time of writing and is happy with his interaction with PKCT. ERM reviewed correspondence between the regulator and PKCT following actual and potential environmental breaches of the PKCT EPL. In general, correspondence between PKCT and the EPA was positive and the pro-active steps taken by PKCT during these events was noted by EPA.			

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		between site management which included a component focused on discussing potential environmental issues concerned with the day's activities. PKCT has received minimal community complaints during the audit period, with complaints recorded, tracked, investigated and closed out.					
Driver's Code of Conduct							
No non-compliances have been identified.							

Environmental Protection Licence 1625

L2.4 Water and/or Land Concentration Limits

Point 16

Pollutant	Unit of measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Oil and grease	Visible	-	-	-	Not visible
Total suspended solids	Milligrams per litre	-	-	-	50

All samples from the audit period were compliant with this condition with the exception of the following samples which exceeded the total suspended solids limit of 50 mg/L:

- 15th March 2019 (84 mg/L);
- 5th June 2019 (97 mg/L);
- 30th August 2019 (96 mg/L); and
- 17th January 2020 (62 mg/L).

The NSW EPA issued a formal warning in April 2019 due to the March TSS exceedance with no further formal action proposed.

Following the June exceedance event, PKCT installed an additional coagulant dosing system, automated the existing system and further progressed capital projects to increase site capabilities to

Consider engaging Finding accepted.

with the EPA with a

view to amending

Condition L2.5 to

include discharges

resulting from high

intensity, short

duration rainfall

events.

NC

NC-2020 005 PKCT accepts the findings of noncompliance associated with this finding occurred as a result of specific events that occurred during the reporting period. For each of the events, PKCT has implemented remedial measures to limit the potential of future occurrences.

PKCT continues to operate in line with its approved Policies, Procedures and Management

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No		manage stormwater. The August exceedance was caused by a coding error that caused the polymer dosing system to under-dose when backup mode was initiated. The coding error was rectified, additional alarms and system checks implemented, water quality monitoring increased and a strategic review undertaken to prevent recurrence. Following the January exceedance, PKCT installed a new automated coagulant treatment plant at the Northern Pond to assist with clay removal following pond cleaning. Due to the TSS exceedances noted above, PKCT has breached this EPL requirement. Condition L2.5 provides for circumstances where the 50 mg/L limit can be exceeded during discharge. The circumstances are limited to a 5 day rainfall depth value of 90 mm over a consecutive 5 day period. For the four exceedance events noted from the audit period, rainfalls immediately preceding the exceedances were high intensity, short duration events, therefore condition L2.5 was not triggered. In the April 2019 formal warning letter, the EPA acknowledged that a high intensity, short duration rainfall contributed to the March exceedance and stated that there is merit in discussing the requirements of L2.5.	Class.		Plans. PKCT continues to maintain accreditation to ISO14001 and ISO9001. The events and associated actions have been reported to, and closed off by the EPA. PKCT does not propose any further actions associated with this non-compliance. Action Status: Completed 9 th September 2020.

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O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	PKCT utilises a water cart to wet down areas of the site which may potentially emit dust from the premises. Real-time weather monitoring is used to guide PKCT's planning and site preparations to minimise dust emissions, such as applying additional water to coal stockpiles. A truck wash is present at the road receival exit and it is mandatory for all trucks to pass through the truck wash to minimise emissions of dust from road transport vehicles accessing PKCT. PKCT monitors residential dust at three locations, with 11 additional monitoring points throughout the site to assist with dust management practices. According to the AEMRs, there were no instances of exceedances of the criteria at any of the residential locations.	C (Obs)	The Air Quality Management Plan and Monitoring Program is currently version 3 (according to the version history table) dated 20 th July 2020 while the document header states the version as 12.0 and the footer states the document authorisation date as 9 th October 2017. The document requires updating to correctly state the current version. (Duplicate observation – See CoA Sch 3 Cl 7)	Obs-2020_003 - PKCT has reviewed and updated the Air Quality Management Plan to adjust the headers, footers and document version. Action Status: Completed 9th September 2020.
		The AEMRs for the audit period reported one month where the criteria were exceeded at one of the 11 industrial gauges, in March 2017. However, there was no associated exceedance reported at any of the residential gauges.			
M2.2	Air monitoring requirements Point 1,2,3,4,5,6,7,8,9,12,15,17,18,19 Pollutant Units of measure Frequency Sampling	The annual returns contained monthly results for Particulates – deposited matter - for all points listed in Condition M2.2 with the exception of P6, which did	NC	Historic NC. No further action.	Finding accepted. NC-2020_006 – PKCT proposes no

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	Particulates – deposited matter Point 20,21 Pollutant PM10 PM2.5 Total Solid Particle	Units of measure Micrograms per cubic metre Micrograms per cubic metre Micrograms per cubic metre Micrograms per cubic metre	-	Sampling method Continuously Continuously Continuously	not have a result for November 2018 due to a broken sample bottle which had been blown over due to strong winds. The Contractor in charge of collecting PKCT dust gauges undertook a full review following this event and repaired any gauges likely to fail. ERM reviewed the real time continuous dust monitoring system and reviewed a spreadsheet containing continuous dust monitoring results from the locations identified in Condition M2.2. ERM did not observe the sampling of dust gauges and is unable to confirm the method complies with AM-19.			further action on this non-conformance. Action Status: Completed 9 th September 2020.
R2.2	The licensee within 7 days Note: The license of incidents of immediately	e must provide writ s of the date on whensee or its emplocausing or threate after the person be with the requirement	nich the incid byees must n ning material becomes awa	ent occurred. otify all relevant harm to the env re of the inciden	relating to notified incidents: Notification of TSS exceedances	C (Obs)	PKCT should confirm laboratory turnaround times to ensure notification of exceedances are made as close to the incident as possible.	Finding accepted. Obs-2020_004 — With reference to the observation, PKCT will engage with our lab to strengthen reporting timeframes to minimise the likelihood of a future issue. Completion by; 31 st October 2020

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		 dated 30th November 2018; and Notification of TSS exceedances during discharge on 15th March 2019, dated 27th March 2019. ERM understands that PKCT notified the EPA of the exceedance on 27th March 2019 following receipt of laboratory analysis on 25th March 2019 confirming the exceedance 			
R4.1	The following must be submitted to the EPA with the Annual Return: A brief summary of the results for all Total Suspended Particulate (TSP) matter, Particulate Matter (PM10) and Particulate Matter (PM2.5) monitoring. Tabular presentation of all TSP, PM10 and PM2.5 levels for monitoring/discharge point 20 and 21. The average result for TSP and PM10 must be detailed within the table. Where the 24-hour concentration of TSP exceeds 90 µg/m3 at point 21, the licensee must undertake an assessment to determine the likely reason for the elevated level, including: weather data; a comparison of TSP levels at monitoring/discharge point 20 and 21; the proportion of TSP that is PM10, PM2.5 and PM1; the contribution of operating conditions; and other relevant factors. Where the 24-hour concentration of PM10 exceeds 50 µg/m3 at point 21, the licensee must undertake an assessment to determine the likely reason for the elevated level, including:	 ERM reviewed annual returns attachments and confirmed that: A brief summary of the results for all TSP, PM10 and PM2.5 monitoring is presented in Section 2.0; Tabular presentation of all TSP, PM10 and PM2.5 levels for monitoring/discharge points 20 and 21 including the average result for TSP and PM10 is included in Attachment B in the 2017/2018 and 2018/2019 annual returns and Attachment C in the 2019/2020 annual return; PKCT has included excerpts from assessments for events where the 24-hour concentration of TSP exceeded 90 μg/m³ at point 21, however, this is only undertaken 	NC	ERM recommends conducting assessments for all exceedances of TSP and PM10 thresholds at point 21 or engaging with the EPA to align this condition with the PKCT Dust Monitoring Program to require investigations only where PKCT is likely to have contributed more than 30% to the exceeding concentration.	Finding accepted. NC-2020_007 — PKCT has discussed with our dust consultant and will include assessments for all exceedances of TSP and PM10 thresholds at Point 21 in future Annual Returns. Completion by; 1st June 2021 (submission of next Annual Return)

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	 weather data; a comparison of PM10 levels at monitoring/discharge point 20 and 21; the proportion of PM10 that is PM2.5 and PM1; the contribution of operating conditions; and other relevant factors. Ambient air quality information used to inform the licensee's Annual Environmental Monitoring Report for the financial year preceding 30 June in the reporting period and information used to inform the licensee's Interim Annual Environmental Monitoring Report for the sixmonth period from 1 July to 31 December in the reporting period may be used to satisfy Condition R4.1. Information collected from 1 January to 31 March in the reporting period may be submitted to the EPA with the next Annual Return. 	likely to have contributed more than 30% to the exceeding concentration of TSP, which is in accordance with the PKCT Dust Monitoring Program. According to the annual returns summary tables, exceedances of the 24-hour concentration of TSP at the point 21 occurred 17 times in 2017/2018 and 2018/2019 and 10 times in 2019/2020, however the annual returns attachments only included investigations for two events in 2017/2018, zero events in 2018/2019 and three events in 2018/2019 and three events in 2019/2020. Therefore, there are instances where the reporting required by this condition has not been included in the annual returns and this condition has not been met; and PKCT has included excerpts from assessments for events where the			
		assessments for events where the 24-hour concentration of PM10 exceeded 50 µg/m³ at point 21, however, this is only undertaken when analysis shows that PKCT is likely to have contributed more than 30% to the exceeding concentration of PM10, which is in accordance with the PKCT Dust			

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		Monitoring Program. According to the annual returns summary tables, exceedances of the 24-hour concentration of PM10 at point 21 occurred 41 times in 2017/2018, 31 times in 2018/2019 and 23 times in 2019/2020, however the annual returns attachments only included investigations for one event in 2017/2018, zero events in 2018/2019 and seven events in 2019/2020. Therefore, there are instances where the reporting required by this condition has not been included in the annual returns and this condition has not been met.			
R4.2	 The following must be submitted to the EPA with the Annual Return: Details of any overflow from Point 22, Point 23, Point 24, Point 25 and/or Point 26 specified by Conditions P1.2 and P1.3. The following information must be provided for each overflow: a tabular presentation of the concentration of each pollutant specified in Condition M2.3; date and time of the commencement of each overflow; an estimate of the volume of each stormwater overflow and over what time period the overflow occurred; the weather conditions at the time of each overflow, specifying the amount of rainfall on a daily basis that had fallen a) on the day(s) of the overflow and b) for each day of the 7 day period prior to the 	ERM reviewed annual returns attachments and confirmed that details of any overflow from Point 22, 23, 24, 25 or 26 included the items required by this condition.	C (Obs)	P1.3 includes Point 27 is not referenced in this condition. ERM recommends clarifying with EPA if details of overflows from Point 27 require submitting with the annual returns.	Finding accepted Obs-2020_005 — PKCT agrees that details of any overflows from Point 27 should be included with the annual returns. PKCT will consult with the EPA and request to have the licence updated to reflect this recommendation.

tem	Assessment Requirement	Comment	Audit	Response/Action	PKCT
No			Class.		Response/Action
	overflow;				10 th March 2021
	an explanation as to why the overflow occurred				
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	ERM confirmed the presence of a copy of the EPL at the premises. The PKCT website also links to a copy of the EPL, however when ERM tested this, the link connected to the incorrect version of the EPL on the EPA website.	C (Obs)	ERM recommends updating the PKCT website to link to the correct version of the EPL.	Finding accepted Obs-2020_006 — PKCT has rectified the website link to the correct version of the EPL. The link now takes the user to the EPA website.
					Action Status: Completed 10 th September 2020.