

ASSESSMENT REPORT

Metropolitan Coal Mine Road Transport Modification (08_0149 MOD 2)

1 BACKGROUND

Metropolitan Coal Pty Ltd (MCPL), a wholly owned subsidiary of Peabody Pacific Pty Ltd, owns and operates the Metropolitan Coal Mine, which is located approximately 30 kilometres (km) north of Wollongong on the Woronora Plateau (see Figure 1).



Figure 1: Regional setting, including road haulage routes

The Metropolitan Coal Mine was approved by the then Minister for Planning on 22 June 2009. A subsequent modification involving the construction of a replacement underground drift was approved on 8 September 2010. The approval allows:

- extraction of up to 3.2 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal from the Bulli coal seam for a period of 23 years using longwall mining methods;
- processing of ROM coal at the surface facilities at Helensburgh;
- extension and upgrading of existing surface facilities;
- rehabilitation of the site;
- transportation of product coal by rail to Port Kembla Coal Terminal;
- transportation of product coal by road to Corrimal and Coalcliff Cokeworks; and
- emplacement of coal reject into the underground mine and/or its transport by road for emplacement at the Glenlee Coal Washery, near Narellan.

1.1 Road haulage routes

There are three key road haulage routes associated with the Metropolitan Coal Mine (refer to the green lines in Figure 1 above), comprising transportation of:

- product coal to Corrimal Cokeworks;
- product coal to Coalcliff Cokeworks; and
- coal reject to Glenlee Washery.

All three routes begin at the mine before heading west along Parkes Street through the town of Helensburgh to the intersection of Parkes Street and the Old Princes Highway.

From this intersection, trucks heading for Corrimal Cokeworks and Glenlee Washery head down the highway before joining the Southern Freeway and heading south. The trucks headed for Corrimal Cokeworks exit at Bulli Pass, then descend the Illawarra Escarpment along Bulli Pass Road/Princes Highway and onto the Northern Distributor, which leads to the Corrimal Cokeworks. The trucks headed for Glenlee Washery exit at Appin Road and continue northwest along this road to Campbelltown, and thence by Narellan Road and the Camden Bypass to the Washery at Narellan.

Trucks headed for Coalcliff Cokeworks travel a short distance along the highway and then turn left onto Sir Lawrence Hargrave Drive, descend the Illawarra Escarpment to the coast and continue along this road to the Coalcliff Cokeworks.

1.2 Existing trucking limits

The approval currently limits the amount of product coal that can be transported by road to 120,000 tonnes per calendar year. Road transport of both coal and coal reject must also only be undertaken between the hours of 7am and 6pm Monday to Friday. MCPL is seeking to modify the project approval to allow for a higher annual amount of product coal to be trucked off-site.

There is no specific limit on the amount of coal reject that can be transported by road, however the Environmental Assessment (EA) for the original project application stated that the annual number of truck movements for coal reject would be capped at the maximum rate occurring at the time of approval.

2 PROPOSED MODIFICATION

On 14 March 2011, MCPL lodged an application to modify its project approval for the Metropolitan Coal Mine under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This application was initially based on seeking approval for an average of 70 trucks per week day. Following agency consultation, and at the request of the Department, MCPL provided further documentation, most recently dated 20 June 2011, which clarified specific elements of the proposal and amended the key changes sought. The proposed modification now only involves amending the conditions of approval to:

- increase the current limit for off-site trucking of product coal from 120,000 tonnes per annum (tpa) to 170,000 tpa; and
- include daily maximum limits of 25 truck departures for product coal to Corrimal Cokeworks, and 30 truck departures for product coal to Coalcliff Cokeworks.

3 STATUTORY CONTEXT

Section 75W

The proposed changes associated with the modification application would not change the purpose of the development for which the existing project approval was originally granted. The proposed modifications involve making minor changes to limits on total truck departures from the site and the total amount of product coal that can be trucked off-site per calendar year. The Department is satisfied that the proposed changes can be properly characterised as a modification to the existing project approval, and can be assessed and approved under section 75W of the EP&A Act.

Approval Authority

The Minister was the approval authority for the original project application. Consequently, the Minister is the approval authority for the modification application. However, the Deputy Director-General, Development Assessment and Systems Performance may determine the application under the former Minister's delegation of 25 January 2010. The Minister's delegation dated 28 May 2011 confirmed that this delegation would continue to operate in circumstances where the local council has not objected to the proposal, less than 25 public submissions in the nature of objections had been received, and where there had been no reportable political donations, which is the present case. Consequently, the Deputy Director-General can determine the application.

4 CONSULTATION

The Department is not required to notify or exhibit applications under section 75W of the EP&A Act. Given the minor nature of the proposed modification, the Department decided not to exhibit this proposal. However, the Department consulted with relevant government agencies, including Wollongong City Council, regarding the modification as initially proposed. None of the submissions objected to the proposal, however some raised concerns. As a result, the Department initiated further consultations with MCPL, which led to the application being varied, as noted above.

A summary of issues raised during consultation is listed below in Table 1. It should be noted that, unless otherwise indicated, these submissions relate to the originally proposed terms of the modification.

Table 1: Summary of Submissions

Agency	Comments or Issues raised
<i>Office of Environment and Heritage (formerly the Department of Environment, Climate Change and Water)</i>	<ul style="list-style-type: none"> • OEH raised concerns about the calculations of the historical and proposed total truck movements in MCPL's initial application, and recommended that further information be sought from MCPL. The Department did so, and MCPL provided a much more detailed breakdown of the truck movements, including statistics relating to daily and annual truck departures to Corrimal and Coalcliff Cokeworks. • OEH noted that the proposed maximum daily limits may result in an increase in the total truck movements from the amount recorded in 2010. OEH also referred to the increasing use of underground emplacement on-site and recommended a staged reduction of truck movements as more coal reject is emplaced underground. • OEH did not raise road traffic noise as an issue.
<i>Wollongong City Council (WCC)</i>	<ul style="list-style-type: none"> • WCC also raised concerns about the proposed total truck movements in the initial application (calculating that, at the then-proposed average of 30 trucks per day, up to 210,600 tpa could be trucked, or more, if larger trucks were introduced). It also raised concerns about the potential amenity impacts, environmental impacts and road wear that could result. • WCC also recommended that a timetable for the future reduction of truck movements from the mine should be implemented through conditions of approval.
<i>Roads and Traffic Authority (RTA)</i>	<ul style="list-style-type: none"> • The RTA did not object to the modification as initially proposed, indicating that it would have no significant impact on the classified road network. The RTA confirmed this position in respect of the final proposal (as summarised above). Since there would be a small increase in total trucking numbers (reflecting up to an additional 20,000 tpa), the RTA suggested that added noise impacts along Sir Lawrence Hargrave Drive should be examined.
<i>Division of Energy and Resources (DRE), Department of Trade & Investment, Regional Infrastructure & Services (formerly Industry and Investment NSW)</i>	<ul style="list-style-type: none"> • DRE raised no concerns relating to the proposed modification.

5 ASSESSMENT

The Department has assessed the proposed modification and believes that there are two key potential impacts, which both relate to truck movements along the haulage routes. These are:

- potential impacts on the key roads leading to Corrimal and Coalcliff Cokeworks; and
- potential amenity impacts on the town of Helensburgh.

5.1 Sir Lawrence Hargrave Drive and Bulli Pass Road

The key segments of the haulage routes are the sections that descend the Illawarra Escarpment to the coast, namely Sir Lawrence Hargrave Drive (to Coalcliff Cokeworks) and Bulli Pass Road (to Corrimal Cokeworks). Due to the steep and windy nature of these roads, they are particularly susceptible to congestion, hazards, noise, safety risks, road surface damage and other traffic impacts.

Total Annual Product Coal Trucking Limits

The proposed modification would significantly increase the annual number of truck departures from the mine as it involves an increase in the total amount of product coal trucked from 120,000 tpa to 170,000 tpa. Table 2 below shows the total amount of product coal trucked off-site between 2006 and 2010, including the amounts trucked to each cokeworks.

Table 2: Total Annual Product Coal Trucked Off-Site (tpa)

Year	2006	2007	2008	2009	2010
Product coal transported to Coalcliff Cokeworks	59,198	73,338	79,782	64,894	87,940
Product coal transported to Corrimal Cokeworks	48,036	69,705	60,622	49,165	62,079
Total product coal transported by road	107,234	143,043	140,404	114,059	150,019

It is evident that in 2010 MCPL trucked just over 150,000 tonnes of product coal from the site, which clearly breached the condition of approval limiting total off-site product coal trucking to 120,000 tonnes. This limit was based on information provided in the EA for the original project application, which would appear to have not been soundly based, since total product coal trucked from the site also exceeded this level in both 2007 (143,043 tonnes) and 2008 (140,404 tonnes), before project approval was granted. Trucking levels have in fact exceeded 120,000 tonnes for 3 of the past 4 years.

Daily Product Coal Trucking Limits

While the proposed modification would involve an increase in total annual truck departures, it would also place a cap on the number of daily truck departures to both Coalcliff and Corrimal Cokeworks. MCPL has proposed a daily maximum limit of 25 truck departures for product coal to Corrimal Cokeworks, and 30 truck departures to Coalcliff Cokeworks.

There is currently no limit in the conditions of approval on the number of daily truck departures to Coalcliff and Corrimal Cokeworks. Consequently, there have been certain days where very high numbers of trucks have departed for Coalcliff and, to a lesser extent, Corrimal (i.e. previous trucking has sometimes taken place on a relatively intense "campaign" basis). Tables 3 and 4 below show the number of daily coal truck departures to each of the cokeworks over the three calendar years 2008 to 2010.

Table 3: Daily Coal Truck Departures to Coalcliff Cokeworks (2008 to 2010)

Daily Departures	Frequency of Occurrence (2008-2010)	Cumulative Frequency (%)
0	495	45.16
1-5	33	48.18
6-10	114	58.58
11-15	307	86.59
16-20	93	95.07
21-25	26	97.45
26-30	17	99.00
31-35	6	99.54
36-40	2	99.73
41-45	0	99.73
46-50	0	99.73
51-55	1	99.82
56-60	1	99.91
61-65	1	100.00

Table 4: Daily Coal Truck Departures to Corrimal Cokeworks (2008 to 2010)

Daily Departures	Frequency of Occurrence (2008-2010)	Cumulative Frequency (%)
0	564	51.46
1-5	17	53.01
6-10	125	64.42
11-15	339	95.35
16-20	24	97.54
21-25	26	99.91
26-30	1	100.00

Despite the occasional high numbers of departures, Table 3 shows that, on 99% of days during this 3-year period, 30 or fewer trucks departed for Coalcliff, travelling along Sir Lawrence Hargrave Drive. Table 4 shows that, on 99.9% of days, 25 or fewer trucks departed for Corrimal, travelling down Bulli Pass. There were only 11 days over this 3-year period where more than 30 trucks departed for Coalcliff, and a single day when over 26 trucks departed for Corrimal. It is worthy of note that there were only three days on which there were very high numbers of departures for Coalcliff (over 50 trucks).

Summary of Potential Traffic Impacts

Given the number of days on which less than five trucks departed to either cokeworks, the Department does not consider the proposed increase in annual truck movements to be likely to lead to a significant traffic impact on either Sir Lawrence Hargrave Drive or Bulli Pass Road. That is, the Department is satisfied that an increase from 120,000 tonnes to 170,000 tonnes would not, in itself, be likely to result in an increase in traffic impacts on these roads.

The Department is more concerned over potential traffic impacts if high numbers of trucks travel on either Sir Lawrence Hargrave Drive or Bulli Pass Road. The traffic impacts on those days are likely to be the highest in terms of congestion, noise and road safety risks. The Department considers that the best way to limit potential traffic impacts is to limit the maximum daily number of trucks from the mine using these roads. For these reasons, it sought detailed information from MCPL regarding the number of trucks that were dispatched to either cokeworks on any day. The information provided showed that large numbers of trucks were dispatched to either cokeworks only on an occasional basis (see Tables 3 and 4).

Consequently, the Department has proposed conditions of approval that would place a maximum daily limit of 30 truck departures to Coalcliff, and 25 to Corrimal. The RTA has supported these proposed maximum daily limits, stating that the proposed limits will minimise impacts on the road network on days when the amount of product coal transported by road could otherwise be significantly higher.

The RTA suggested that noise impacts along Sir Lawrence Hargrave Drive should be taken into account as it has received complaints relating to heavy vehicle braking noise. The Department has considered the potential noise impacts and does not believe that additional noise assessment is warranted. The increase in annual deliveries of product coal to the two cokeworks (potentially up to 20,000 tpa above 2010 deliveries, with no more than two thirds of this likely to go to Coalcliff) is minor. OEH did not raise road traffic noise as an issue. The Department considers it unlikely that the proposal would result in a breach of the permissible increase criterion of 2 dB(A) under the Environmental Criteria for Road Traffic Noise (ECRTN) policy. The Department also considers that noise impacts would be managed effectively by the proposed maximum daily limit of 30 truck departures to Coalcliff.

5.2 Helensburgh

The Helensburgh segment of the haulage routes is also important to consider as it is the common component for the transport of all product coal and coal reject from the mine. Parkes St is a local road passing directly through the town of Helensburgh, so the potential for traffic, noise and other impacts is higher than on major roads and freeways located further from residential property. Table 5 shows total coal reject and product coal transported from the site over the 3 years from 2008 to 2010.

Table 5: Total Amounts and Percentages of Product and Coal Reject Trucked Off-Site

Year	2008		2009		2010	
	tpa	%	tpa	%	tpa	%
Total coal reject	406,999	74	265,515	70	312,355	68
Total product coal	140,404	26	114,059	30	150,019	32
Total product coal and coal reject	547,403	100	379,574	100	462,374	100

Table 5 shows that, since 2008, the total amount of coal reject trucked off-site has also decreased from 407,000 tpa to 312,355 tpa. The combined tonnage of product coal and coal reject has also decreased, from 547,403 tpa to 462,374 tpa. However, the amount of coal reject generated is largely proportional to the quantity of run-of-mine coal produced. The Department notes that run-of-mine coal production in 2010 was 1.85 million tpa, whereas the mine's approved limit is 3.2 million tpa. Consequently, it is possible that the quantity of coal reject produced will increase. However, MCPL has made a commitment that the annual rate of coal reject transport to Glenlee would not exceed the maximum applying when its 2008 EA for the Metropolitan Coal Mine Project was prepared (i.e. 407,000 tpa).

Underground emplacement

MCPL has recently commissioned the first stage of its underground emplacement system for coal reject, whereby coal reject is crushed to form a fluidised paste which is then pumped via pipeline into abandoned areas of the underground workings. This system will gradually replace off-site emplacement via trucks and will therefore gradually reduce the total number of truck departures otherwise required. MCPL is expecting to emplace some 50,000 tonnes of coal reject underground during the remainder of 2011, increasing this to the current 150,000 tpa capacity in 2012, with an eventual target capacity of 600,000 tpa by around 2015.

Under its approval conditions, MCPL is required to cease all off-site trucking of coal reject from the mine by 2021. MCPL has indicated that the underground emplacement system is likely to entirely replace off-site trucking of coal reject by 2015. MCPL has a financial incentive to increase paste emplacement, to eliminate the expensive off-site transport and emplacement some 65 km away at Glenlee.

Consequently, the Department is satisfied that the total number of daily truck departures under the proposed modification is unlikely to be significantly greater than in recent years, notwithstanding the proposed increase in off-site trucking of product coal.

Complaints

Under the existing conditions of approval, MCPL is also required to closely monitor traffic, noise and other impacts on the residents of Helensburgh, as well as maintain a register of any complaints lodged. The number of traffic and traffic noise complaints received is generally very low. In the period from 2006 to 2010, the number of complaints ranged from zero in 2006 and 2008 to four in 2009 and six in 2010 (which included complaints related to construction deliveries). The Department notes that although the highest number of average truck departures occurred in 2008, there was zero complaints registered from Helensburgh residents in that year.

Summary of Traffic Impacts on Helensburgh

Given that the number of daily truck departures under the proposed modification is unlikely to be significantly greater than in recent years, and the low level of complaints received, the Department is satisfied that there would not be a material change to traffic impacts on Helensburgh. The Department is also satisfied that the conditions of approval relating to complaints procedures provide an appropriate way to monitor any potential traffic-related impacts that may arise in the future.

6 RECOMMENDED CONDITIONS

The Department has drafted recommended conditions for the modification application. MCPL has reviewed and accepted these conditions.

7 CONCLUSION

The Department has assessed the proposed modification in accordance with the relevant requirements of the EP&A Act, including the objects of the Act and the principles of ecologically sustainable development, and is satisfied that it is in the public interest and should be approved.

8 RECOMMENDATION

It is RECOMMENDED that the Deputy Director-General, Development Assessment and Systems Performance, as delegate of the Minister:

- **considers** the findings and recommendations of this report;
- **determines** that the proposed modification falls within the scope of section 75W of the EP&A Act;
- **approves** the application under section 75W, subject to conditions; and
- **signs** the notice of modification in Appendix A.

Howard Reed

Howard Reed
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24.6.11



1.7.11

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