

FAXED
4/9/01

*faxed copy on
Glennies Creek file
NR1/00267/7*

Your Reference : DA Nos DIA-105-90-M2 and DIA 86-2889-M4:
Our Reference : 271392A2 and 271383A5 NEF6444
Contact : Peter Hughes, 4926 9969

*rec'd 7-9-01
JH*



Coastal Regions

Mr R Lloyd
Development Infrastructure Assessment
Department of Urban Affairs and Planning
GPO Box 3927
SYDNEY NSW 2000

4 SEP 2001

Dear Mr Lloyd

Re: DA No. DIA-105-90-M2 – Proposed Modification to Surface Facilities at Camberwell Coal Mine and DA No. DIA 86-2889-M4 - Proposed Modification to Surface Facilities at the Glennies Creek Coal Mine

I refer to the above stated proposals. The Environment Protection Authority's (EPA) has reviewed the Statements of Environmental Effects (SEE) for both proposals and, as they are linked, our comments on both proposals are provided below.

The recommended consent conditions provided in Attachment A apply only to the Camberwell Coal Mine. If the Minister grants development consent to the proposal these conditions should be incorporated into the consent. The conditions relate to the development as proposed in the SEE and information currently provided to the EPA. In the event that the development is modified, either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to consult with the EPA about the changes before the consent is issued. This will enable the EPA to determine whether its conditions need to be modified in light of the changes.

If development consent is granted for the proposals the Licensee for Camberwell Coal Mine will need to submit an application to the EPA to vary existing environment protection licence no 3390 to seek approval for a new scheduled activity covering coal works in excess of 500 tonnes per day. Depending upon further details submitted to the EPA with a licence variation application it may also be necessary to amend and/or add noise and dust monitoring conditions to the licence.

Noise Impact Assessment

The report(s) assess the potential noise impacts of the proposal against the existing Development Consent conditions and the Industrial Noise Policy (for winter and summer months).

The assessments are considered satisfactory and will enable the EPA to recommend how the alteration to the existing operations can be addressed should the proposal be approved. A detailed review of the assessment is included as Attachment B.

Environment Protection Authority

PO Box 488G Newcastle NSW 2300 Australia

Telephone 61 2 4926 9971

Facsimile 61 2 4929 6712

ABN 43 692 285 758

www.epa.nsw.gov.au

Ground Floor NSW Government Offices 117 Bull Street Newcastle West NSW 2302

In summary, the proposal would appear to generate noise levels in compliance with the current Development Consent limits. The Consent limits are based on "neutral" meteorological conditions whereas the current EPA Industrial Noise Policy (INP) requires that assessments take into account existing weather conditions (eg. wind and temperature inversions). The proponent has proceeded to assess the noise impacts from the proposal in accordance with the INP.

Assessment of the noise impacts in accordance with the INP identifies exceedances of the Project Specific Noise Levels (PSNL) of up to 5dB(A) at the Noble, Mordey and Lambkin residences which are outside the Current Zone of Affection (CZA). The extent of the exceedance depends on the operations that are taking place and the weather conditions at the time. The report indicates that use of the western and central haul roads is the predominant cause for exceedances of the PSNL.

The proponent intends to exclude use of the western haul road during the night period and the assessment indicates that the central haul road will be replaced by the overland conveyor. The proponent states that these measures will reduce noise emissions but there still may be a slight exceedance of the PSNL.

The EPA recommends the Development Consent noise limits specified in Attachment A which are consistent with the INP.

If you require clarification of the EPA's requirements please contact Peter Hughes at the EPA's Newcastle Regional Office on 4926 9969.

Yours sincerely

A handwritten signature in black ink, appearing to read 'MB' followed by a stylized flourish.

MITCHELL BENNETT
Head Regional Operations Unit – Hunter

ATTACHMENT A – Recommended Consent Conditions – DA No. DIA-105-90-M2 – Proposed Modification to Surface Facilities at Camberwell Coal Mine

M12 Requirement to monitor noise

M12.1 Based on information submitted with a licence variation application a condition may be added that specifies additional and/or amended noise monitoring requirements. 2
rec?

M13 Requirement to monitor dust

M13.1 Based on information submitted with a licence variation application a condition may be added that specifies additional and/or amended dust monitoring requirements.

Noise Limits

The licensee shall ensure that noise emissions from the operation do not exceed the noise limits in the table below during winds (0-3m/s) at 10m height above ground level and temperature inversions up to 3°C/100m at the nominated residences.

Noise Levels for Glennies Creek and Camberwell Coal Mines at Sensitive Receivers $L_{eq}(15 \text{ min})$, dB

Residence*	$L_{eq}(15 \text{ min})$, dB
Mordey, Noble	41
Lambkin, Watling, Oxford, G. Hall, Proctor, Richards	39
Egan, Payne	36

(*Note: These limits do not apply to residences within the Current Zone of Affection – Dulwich and Tisdell)

For the purpose of the noise criteria for this condition, 5dBA must be added to the measured level if the noise is substantially tonal or impulsive in nature. Where two or more of these characteristics are present the maximum addition to the measured noise level is limited to 10dBA.

Noise Monitoring

For the purpose of noise measurement, the L_{Aeq} noise level must be measured or computed over the required period using “FAST” response on the sound level meter.

Noise from the premises is to be measured or computed at the most affected point on the residential boundary or within 30m of the dwelling where the dwelling is more than 30m from the boundary to determine compliance with this condition.

Hours of Operation (Western Haul Road)

Use of the western haul road (loading and truck haulage of coal) is limited to between:

- 7am to 10pm Monday to Saturday; and
- 8am to 10pm on Sundays and Public Holidays.

Noise Management Plan

A Noise Management Plan must be submitted to the DUAP prior to the proposed operations commencing detailing noise reduction techniques to be implemented to reduce noise emissions from the site to meet Project Specific Noise Levels. The Plan must include timeframes for implementation and a noise monitoring protocol to assess compliance with the licence noise limits.

ATTACHMENT B – REVIEW OF THE NOISE IMPACT ASSESSMENTS

Proposed Hours of Operation

Camberwell: The plant is able to operate 363 days/year, 24 hrs/day. Maintenance is likely to decrease the operational hours to an average of 19.7 hrs/day.

Glennies Creek: Overland conveyor and central haul road 24 hrs/day, 7 days/week, coal extraction 24 hrs/day, Mon – Sat and use of the western haul road will be limited to 7am to 10pm, 7days/week (8am Sun).

Nearest Residential Receivers

A list of the residential premises around both the Camberwell and Glennies Creek coal mines are presented in Table 1 and 2.

Table 1 Residential Premises around the Glennies Creek Coal Mine (Non company owned)

Name of Residential Premises	Proximity to existing mine facilities
Dulwich*	1.2km SSW
Sydenham	1.4km NNW
Mardoney	2.2km WSW
Name of Residential Premises	Proximity to Hebden Seam facilities / train loop / CHPP
Dulwich*	0.6km
Sydenham	1.3km
Mardorney	1.3km
Glenelge	2.1km
Name of Residential Premises	Proximity to reject emplacement area
Dulwich*	1.9km
Sydenham	1.1km
Mardorney	3km
Glenelge	0.7km
Moore	1km
Ventura	1km
Payne	0.6km
Evans	0.5km
Cherry	0.8km

Note: *Within Current Zone of Affection (CZA)

Table 2 Residential Premises around the Camberwell Coal Mine (Non company owned)

Name of Residential Premises	Proximity to existing mine facilities
Mordey	East
Lambkin	East
Egan	North
Payne	North
Noble	North
Watling	West
Oxford	West
Hall	West
Proctor	West
Dulwich*	West
Tisdell*	West
Richards	West

Note: *Within Current Zone of Affection (CZA)

Background Noise Levels

The proponent has used 72 hour survey results, at three residential locations (Hardy, Watling and Mordey), conducted at various times during 1998 and 1999, as a part of the mines regular monitoring, to establish the background noise levels for the area.

Table 3 Summary of Ambient Noise Levels

Receiver	Day (7am to 6pm)	Evening (6pm to 10pm)	Night (10pm to 7am)
Hardy – North	31 dB(A) L ₉₀	36 dB(A) L ₉₀	33 dB(A) L ₉₀
	54 dB L _{Aeq}	49 dB L _{Aeq}	48 dB L _{Aeq}
Watling – West	34 dB(A) L ₉₀	38 dB(A) L ₉₀	34 dB(A) L ₉₀
	56 dB L _{Aeq}	49 dB L _{Aeq}	46 dB L _{Aeq}
Mordey – East	34 dB(A) L ₉₀	35 dB(A) L ₉₀	33 dB(A) L ₉₀
	54 dB L _{Aeq}	48 dB L _{Aeq}	41 dB L _{Aeq}

The background noise levels would appear to be reasonable.

Operational Noise (Intrusive) Criteria

Project Specific Noise Levels were calculated from the background noise levels in Table 3. Table 4 summarises the HLA derived Intrusive Project Specific Noise Levels for the residences.

Table 4 HLA Project Specific Noise Limits based on Intrusive Criteria

Residence*	Day L _{Aeq} (15minutes)	Evening L _{Aeq} (15minutes)	Night L _{Aeq} (15minutes)
Mordey	39	39 ^{1, 2}	38
Lambkin	39	39 ^{1, 2}	38
Egan	36	41 ²	38 ²
Payne	36	41 ²	38 ²
A. Noble	36	41 ²	38 ²
Watling	39	43 ²	39
Oxford	39	43 ²	39
G. Hall	39	43 ²	39
Proctor	39	43 ²	39
Richards	39	43 ²	39

Notes:

*The PSNL's for Dulwich and Tisdell have not been included in this table as they are within the Current Zone of Affection.

¹ Possible typographical error in HLA Report. Based on ambient noise levels the L_{Aeq} should be 40dB.

² There are anomalies in the data whereby the evening and night time intrusive noise levels were higher, in some instances, than the daytime levels. In these situations the EPA prefers that the more stringent criteria is applied to the evening and night time periods.

Predicted Noise Impacts

An assessment was undertaken incorporating all significant noise sources associated with the proposed works and the existing site which was said not to contribute significantly to mining noise levels at nearby residential receivers. The assessment measured compliance with the current Development Consent (under "neutral" conditions) and INP Intrusive Noise criteria (including wind and temperature inversions). The report indicated that the proposed activities would comply with the Consent conditions but would exceed the INP Project Specific Noise Levels at a number of residences. Table 5 shows the exceedances of the PSNL. It should be noted that there will be significant exceedances at Dulwich and to a much lesser extent, Tisdell. As these properties are within the Current Zone of Affection they have not been considered as part of this assessment.

Table 5 Exceedances of PSNL*

Residence	INP (Summer)			INP (Winter)		
	Day	Evening	Night	Day	Evening	Night
Conveyor + North Dump + Washery						
Mordey					1	1
Noble	2	2	2			
Western Haul Road Only						
Noble	1	1	1			
Western Haul Road + North Dump + Washery						
Mordey					2	2
Lambkin					1	1
Noble	5	5	5			
Central Haul Road + North Dump + Washery						
Mordey					2	2
Lambkin					1	1
Noble	5	5	5			

Note: *These exceedances are based on the evening and night time levels being corrected if they were higher than the daytime PSNL.

The most significant impact is from use of the western and central haul roads. The proponent has undertaken to limit use of the western haul road to daytime and evening hours and the central haul road will be replaced by the overland conveyor which will also reduce noise levels.

A 1-2dBA exceedance of the PSNL can be considered a marginal exceedance of the planning noise criteria, while 3-5dBA above the PSNL constitutes a noticeable exceedance of the planning noise criteria. Greater than 5dBA over the PSNL is likely to result in a significant impact.

The EPA recommends that Development Consent Conditions be updated to reflect the Industrial Noise Policy. This would constitute incorporation of new noise limits into the Development Consent (See Attachment A). The noise limits would also be incorporated into each of the Glennies Creek and Camberwell Coal Mines POEO licences.

These levels are slightly higher than the PSNL in some instances which coincide with the predicted noise levels presented in the SEE. It is expected that noise levels will reduce once the overland conveyor has been commissioned. Use of the overland conveyor needs to be a priority for the proponent.

In addition, a Noise Management Plan should be prepared by the proponents detailing noise reduction strategies that could be employed through the life of the mine to meet Project Specific Noise levels.