

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

I modify the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.



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Deputy Director-General, Development Assessment
(as Delegate for the Minister for Planning)

Sydney

21 July

2009

SCHEDULE 1

The development consent (DA 97/800) for the Mandalong Coal Mine, (then known as the Cooranbong Colliery extension) granted by the Minister for Urban Affairs and Planning on 7 August 1998.

SCHEDULE 2

1. Delete the abbreviations for DLWC, DMR, DUAP, Director-General, EPA, mining zone and NPWS and their definitions from the table titled "Abbreviations and definitions" in Schedule 2 and insert in alphabetical order the following:

DECC	Department of Environment and Climate Change
Department	Department of Planning
Director-General	Director-General of the Department of Planning, or delegate
DPI	Department of Primary Industries
DWE	Department of Water and Energy
EA	Environmental Assessment
Environmental consequences	Environmental consequences of Subsidence Impacts, including: damage to infrastructure, buildings and residential dwellings; loss of surface flows to the subsurface; loss of standing pools; adverse water quality impacts; development of iron bacterial mats; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; ponding; etc
Mandalong flood plain	Any surface land located below the 1% AEP flood level within the site or marked with an asterisk in Schedule 4
Mandalong Services Site	Former Cooranbong Colliery Site
PSMP	Property Subsidence Management Plan
ROM	Run-of-mine
Site	Land described in Schedule 1 and shown in Schedule 3
SMP	Subsidence Management Plan
Subsidence or subsidence effects	Deformation of the ground mass due to mining, being all mining-induced ground movements, including both vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by Subsidence Effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
TARP	Trigger, Action, Response Plan

2. Delete all references to "EPA" from Schedule 2 and replace with "DECC".
3. Delete all references to "NPWS," in Condition 9 and 107 of Schedule 2.
4. Delete all references to "NPWS" and replace with "DECC" in Conditions 70, 72, 73, 74, 83 and 84 of Schedule 2.

5. Delete all references to "DMR" from Schedule 2 and replace with "DPI".
6. Delete all references to "NSW Agriculture" from Schedule 2 and replace with "DPI".
7. Delete all references to "DUAP" from Schedule 2 and replace with "the Department".
8. Delete all reference to "DLWC" from Schedule 2 and replace with "DWE".
9. Delete condition 1 (vi) of schedule 2 and the following text in that condition and replace with:
 - (vi) the modification application DA 97/800 – MOD 4 and accompanying Environmental Assessment entitled *Mandalong Mine Modification to Development Consent Environmental Assessment*, dated September 2008;
 - (vii) the Revised Statement of Commitments dated June 2009 (see Appendix 1); and
 - (viii) the conditions of this consent.

If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.

10. Insert the following after Condition 1 of Schedule 2.

Limits of Approval

- 1A. The Applicant shall not:
 - (a) extract more than 6 million tonnes of run-of-mine (ROM) coal a year from the site;
 - (b) transport more than 4 million tonnes of ROM coal a year from the site to the Mine Services site (former Cooranbong Colliery);
 - (c) transport more than 2 million tonnes of product coal to Eraring Power Station by overland conveyor; or
 - (d) transport more than 2 million tonnes of product coal to Newstan Colliery by private haul roads.

Note: Under consent DA 35-2-2004 the Applicant is permitted to transport up to 4 million tonnes of ROM coal a year from the site by underground conveyor to the Delta Entry site (Wyee Coal Handling Plant).

11. Delete all text, except for the first sentence, from condition 4 of schedule 2.
12. Delete the word "Longwall" from condition 7 of schedule 2.
13. Delete the words "under s138 of the Coal Mine Regulation Act, 1982" from condition 10 of schedule 2.
14. In condition 12 of schedule 2 delete all references to "s138 application" and replace with "application for SMP approval".
15. Delete conditions 13 to 22 of schedule 2 and replace with the following:

Costs of Management Measures

13. The Applicant shall be responsible for the costs of all impact management measures (including measures to minimise, mitigate, offset or remediate impacts of the development which are not recoverable by a third party through the *Mine Subsidence Compensation Act 1961* or the *Mining Act 1991*) including but not limited to remediation of natural features, rehabilitation of ecological systems, and monitoring of the effectiveness of the works, as determined by the Director-General.

SUBSIDENCE

Subsidence Management Plans

14. Prior to carrying out any underground mining operations that could cause subsidence in either Area 1 or 2, the Applicant shall prepare a Subsidence Management Plan (SMP) which must:
 - (a) include a mine plan for the relevant area;
 - (b) include a minimum of 2 years of baseline data, collected at appropriate frequency and scale;
 - (c) integrate ongoing management of previously mined areas;
 - (d) identify and assess the significance of all natural features located within 600 m of the edge of secondary extraction;
 - (e) include a detailed subsidence impact assessment, clearly distinguishing, describing and adequately quantifying all predicted subsidence effects, subsidence impacts and environmental consequences;
 - (f) include management, monitoring and contingency plans for all significant man-made and natural features which may experience subsidence effects, subsidence impacts or environmental consequences, including:
 - dwellings and buildings;
 - roads, electrical, communications and other infrastructure;

- landscape;
 - groundwater;
 - terrestrial flora and fauna and ecology (including any threatened species and their habitats); and
 - Aboriginal and other cultural heritage;
- (g) propose limits on subsidence impacts and environmental consequences to be applied within the relevant area;
 - (h) be prepared in consultation with DWE, DPI, Lake Macquarie Council and the Department;
 - (i) be publicly advertised when submitted for approval;
 - (j) be approved by the Director-General of DPI prior to the carrying out of any underground mining operations that could cause subsidence in the relevant area (including related gateroads, but not main headings);
 - (k) be otherwise prepared in accordance with any guidelines for SMPs developed by the Department and/or DPI; and
 - (l) be implemented, following approval, to the satisfaction of the Director-General of DPI.

Notes:

- *The contingency plans required under paragraph (f) must address remediation (where appropriate) and be based on a TARP structure.*
- *In reviewing an SMP, the Director-General may require changes in respect of subsidence impact limits, subsidence management mechanisms or other matters.*
- *An SMP approved by DPI prior to 31 July 2009 is taken to satisfy the requirements of this condition.*
- *In respect of the first SMP prepared under this condition, the Director-General may accept less than 2 years baseline data.*

Property Subsidence Management Plans

15. If subsidence may cause impacts on privately-owned land, the Applicant shall prepare, and pay the costs of, an individual Property Subsidence Management Plan (PSMP) for each affected land title (or group of titles if agreed by the landowner). Each PSMP shall:
 - (a) be provided to the landowner at least 7 days prior to the public advertisement of the SMP as submitted;
 - (b) be prepared in consultation with the landowner. This consultation shall include discussions on integrating any proposed mitigation works with the management of the property as a whole;
 - (c) ensure that, with the consent of the landowner and in consultation with MSB, a structural inspection is conducted for each structure on the land and a comprehensive structural integrity report prepared (addressing all relevant components including roofs, ceilings, openings, foundations, household sewage treatment and disposal systems, etc);
 - (d) include a detailed subsidence impact assessment for the property clearly setting out all predicted subsidence effects, subsidence impacts and environmental consequences (based on best available geological and mine planning data);
 - (e) include a survey of drainage channels within and adjacent to the land;
 - (f) assess current agricultural utilisation, agricultural improvements and the underlying agricultural suitability of the land;
 - (g) assess current utilisation of the land for business purposes (other than agriculture), including the value of business improvements and the business; and
 - (h) indicate whether the landowner is entitled to acquisition of their land under conditions 27, 28 or 29.

If the landowner fails to grant the Applicant access to their property within a reasonable timeframe for the purposes of this condition then, with the approval of the Director-General, the studies required by this condition may be conducted remotely.

16. Where mining is proposed under the Mandalong flood plain, the Applicant shall ensure that PSMPs include an appropriate assessment of:
 - (a) predicted 1:1 year and 1:100 year flood levels relative to the floor level of buildings, swimming pools and sheds;
 - (b) freeboard of habitable dwellings between predicted post-mining floor levels and the 1:1 year and 1:100 year modelled flood levels;
 - (c) predicted 1:1 year and 1:100 year flood levels relative to roads and access tracks determining depth of inundation, period of inundation and flow velocities;
 - (d) the extent of any remnant ponding that may result from the proposed mine plan relative to any fences, wetlands, forested areas, drainage courses, dams and areas of agricultural production (including grazing);
 - (e) the magnitude and direction of predicted overland flows and the potential for channel realignment to occur as a result of mining; and
 - (f) the potential for transient aspects of mining resulting in temporary flooding impacts beyond those of the fully mined landform.

17. Either prior to or at the same time as the PSMP is provided to the landowner, the Applicant is to provide the landowner, in writing, with:
- (a) an offer to pay any reasonable costs for the landowner to obtain legal and other advice on the PSMP;
 - (b) an offer to meet with the landowner to review the PSMP and to discuss:
 - predicted impacts and consequences to any dwelling, improvement or land; and
 - proposed mitigation measures for the individual property; and
 - (c) information identifying the landowner's rights to acquisition and compensation in accordance with this consent, *Mining Act 1992* and *Mine Subsidence Compensation Act 1961*.

Notes:

- *Any dispute between the Applicant and a landowner regarding the implementation of the Applicant's responsibilities under conditions 15-17 may be referred to the Director-General under condition 99 of this consent.*
- *A PSMP provided to a landowner prior to 31 August 2009 is taken to satisfy the requirements of conditions 15 - 17.*

End of Panel Reporting

18. Within 4 months of the completion of each longwall panel, or as otherwise permitted by the Director-General, the Applicant shall, to the satisfaction of the Director-General:
- (a) prepare an end-of-panel report:
 - reporting all subsidence effects (both individual and cumulative) for the panel and comparing subsidence effects with predictions;
 - describing in detail all subsidence impacts (both individual and cumulative) for the panel;
 - discussing the environmental consequences for all man-made and natural features impacted by subsidence; and
 - comparing subsidence impacts and environmental consequences with predictions; and
 - (b) submit the report to the Mandalong CCC, Department, DPI, DECC, DWE and any other relevant agency.
19. The Applicant shall include a comprehensive summary, analysis and discussion of the results of monitoring of subsidence effects, subsidence impacts and environmental consequences in each AEMR.

Subsidence Expert Assessments

20. The Applicant shall pay the reasonable costs of the Department in engaging independent experts to advise it when it assesses SMPs prepared under condition 14.

Revision of Strategies, Plans or Programs

21. The Applicant shall prepare revisions of any strategies, plans or programs required under this consent if directed to do so by the Director-General. Such revisions shall be prepared to the satisfaction of, and within a timeframe approved by, the Director-General.

22. *(deleted)*

16. In condition 25(ii) of schedule 2 delete all words following "in accordance with" and replace with:
- "Condition 15 is received, if the PSMP indicates the landowner is entitled to acquisition under conditions 27, 28 or 29."
17. In condition 26 of schedule 2 delete the word "Colliery" and replace with "Mandalong Services".
18. In conditions 27, 28 and 29 of schedule 2 replace the words:
- "notification" with "the PSMP"; and
- "Condition 21(ii)" with "Condition 15".
19. In conditions 27 and 29 of schedule 2 replace the words:
- "Condition 14(v)" with "Condition 15(c)"; and
- "Condition 14" with "Condition 15".

20. Delete condition 44 and 45 of Schedule 2 and insert the following:

44. The Applicant shall ensure that the noise generated by the development at any residence on privately-owned land, or on more than 25% of any privately-owned land, does not exceed the noise impact assessment criteria in Table 1 for the noise receiver location nearest to that residence or land.

Table 1: Noise impact assessment criteria (dB(A))

Noise Receiver Locations	Day <i>L_{Aeq}(15 minute)</i>	Evening <i>L_{Aeq}(15 minute)</i>	Night <i>L_{Aeq}(15 minute)</i>
23	36	39	39
72 (shown as property 313 in schedule 4)	37	35	38
85 (shown as property 314 in schedule 4)			
26	35	37	37
86 (shown as property 308 in schedule 4)	35	35	36
89 (shown as property 310 in schedule 4)			
110 (shown as property 244 in schedule 4)			
All other privately-owned land	35	35	35

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

Notes:

- The noise receiver locations are as described in the EA accompanying DA 97/800 MOD 4, and shown in Schedule 6.
- To determine compliance with the *L_{Aeq}(15 minute)* noise limits, noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the development is impractical, the Department 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.
- The noise emission limits identified in the above table apply under meteorological conditions of:
 - wind speeds of up to 3 m/s at 10 metres above ground level; or
 - temperature inversion conditions of up to 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.

45. The Applicant shall prepare and implement a Noise Monitoring Program for the development to the satisfaction of the Director-General. This program must:

- be submitted to the Director-General for approval prior to 30 September 2009, or other time agreed by the Director-General; and
- include:
 - attended noise monitoring measures; and
 - a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent.

21. In condition 65 of schedule 2 delete “s138” and replace with “SMP”.

22. After condition 66, insert the following:

- 66A. The Applicant shall only discharge mine water from the site in accordance with the provisions of an Environmental Protection Licence or section 120 of the *Protection of the Environment Operations Act 1997*.

23. In condition 94 of schedule 2 delete “, and to NPWS where relevant”.

24. In condition 99 of schedule 2 delete “Urban Affairs and”.

25. Delete Conditions 100 and 101 and replace with:

100. The Applicant shall operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Director-General in general accordance with the *Guideline for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version)*. The CCC is to include at least four community representatives

including at least one member of the Mandalong Progress Association, nominated by the Association.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the Guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the general community in the area of the development.*

101. (deleted)

26. Delete conditions 108 to 110 and replace with:

108. Prior to 31 March 2010, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:

- (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
- (b) include consultation with the relevant agencies;
- (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant mining lease and EPL (including any strategy, plan or program required under these approvals);
- (d) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate,
- (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in the fields of subsidence and surface and groundwater management or other expert required by the Director-General.

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

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

27. Delete condition 112 and the notes following and replace with the following:

Access to Information

112. Within 3 months of the approval of any strategy/plan/program required under this consent (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or AEMR required under this consent, the Applicant shall:

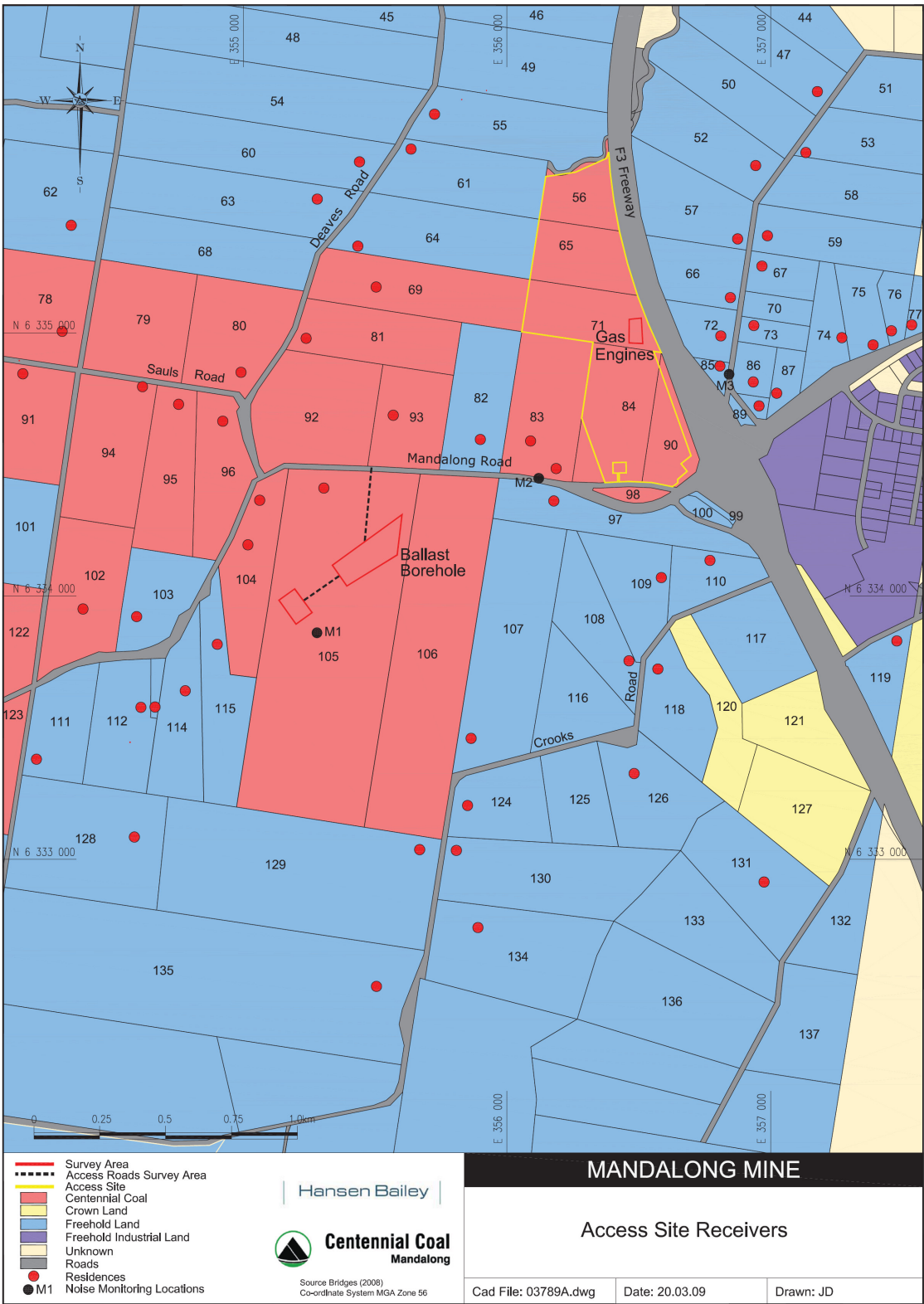
- (a) provide a copy of the relevant document/s to the relevant agencies and CCC;
- (b) place a copy of the document/s on its website; and
- (c) remove superseded copies of strategies/plans/programs from its website.

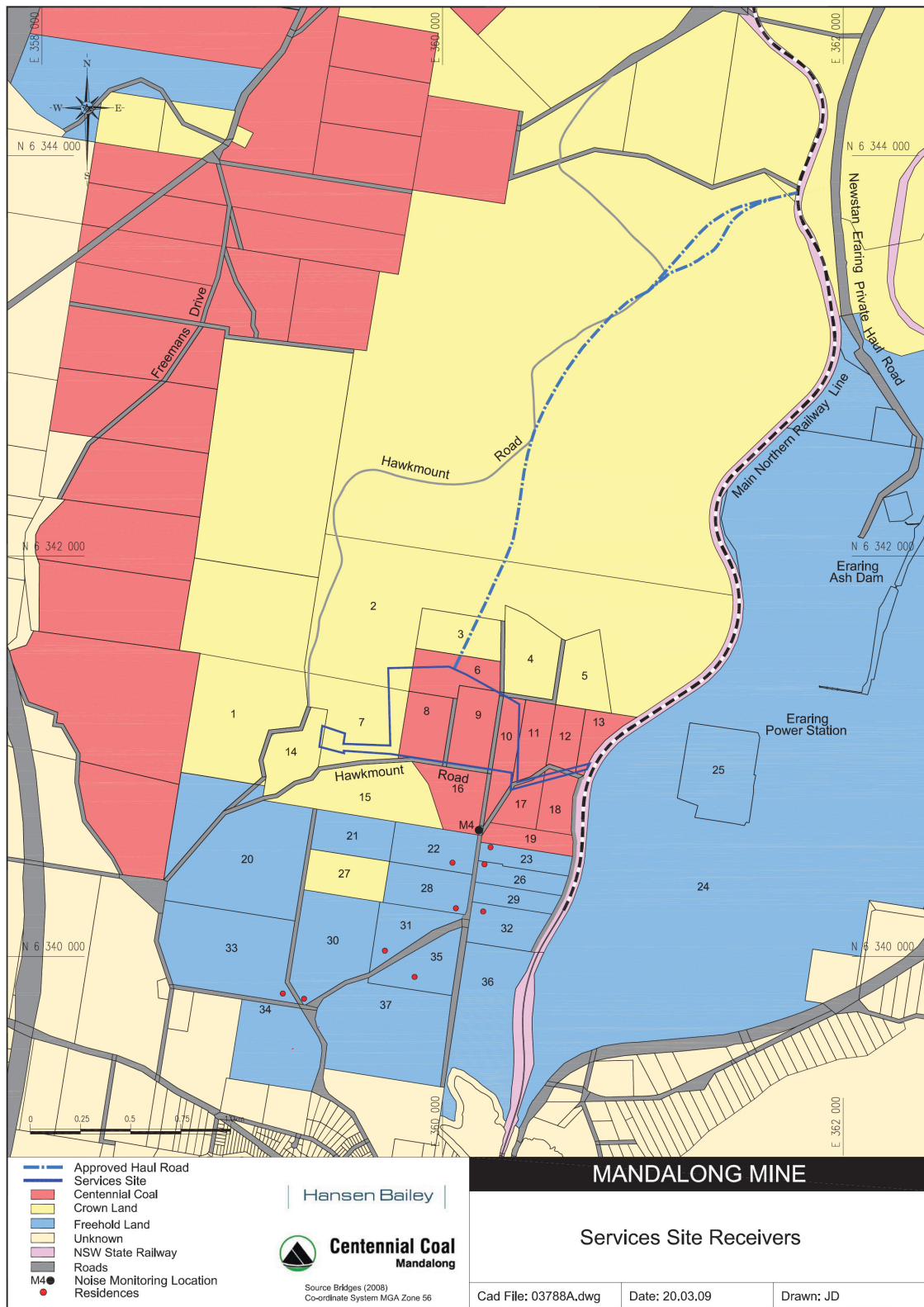
113. During the development, the Applicant shall:

- (a) make a summary of monitoring results required under this consent publicly available on its website; and
- (b) update these results on a regular basis (at least every 3 months).

28. Immediately following Schedule 5 insert a new Schedule 6 as follows:

SCHEDULE 6 – NOISE RECEIVER LOCATIONS





29. Immediately following the new Schedule 6, insert Appendix 1 as follows:

APPENDIX 1 - STATEMENT OF COMMITMENTS

Statement of Commitments

Ref	Commitment	EA Section
Operational Commitments		
1.	Undertake the components of the Modification generally in accordance with the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008.	3.0
2.	Gas engines to be constructed and operated generating 12 Megawatts capacity, with a stack height of at least 10 m to be fuelled by methane from Mandalong underground coal seams.	3.1.1
3.	Activities at the ballast borehole site and construction of the gas engines will occur during the day time only (i.e. 7:00 am to 6:00 pm).	3.1.1
4.	The coal extracted shall not exceed 6 Mtpa Run of Mine.	3.1.2
5.	Longwall panels will be designed up to 250 m in width ensuring all sensitive surface features remain safe, serviceable and repairable, to the approval of the Department of Planning and the Department of Primary Industries.	3.1.4 & 7.1.6
6.	Construct the ballast borehole within the survey area shown on Figure 4 of the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008, with earthen bunds and/or tree screening undertaken to mitigate visual impact on nearby private residences.	1.1.1
7.	Revise the existing Mining Operations Plan to incorporate components of this Modification and continue to develop Subsidence Management Plans in accordance with the current Department of Primary Industries' guidelines.	4.3.2
8.	Seek a variation to Environmental Protection Licence 365 under the Protection of the Environment Operations Act 1997 to take into account the proposed Modification.	4.3.3
Stakeholder Consultation		
9.	Continue to advise regularly the CCC and other relevant stakeholders consistent with the Mandalong Stakeholder Communication Strategy.	5.0
10.	Continue to communicate environmental management initiatives both internally and externally to regulatory authorities, near neighbours, the Aboriginal community and other interested stakeholders.	5.4
Environmental Management		
11.	Utilise existing Environmental Management Plans as required and continue to operate an Environmental Management System consistent with that described in the Environmental Assessment and where required, incorporate this Modification.	2.5
Noise		
12.	Mining related activities will be conducted in a manner that ensures noise emissions meet the criteria in Table 18 of the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008 at private receivers.	7.2.3
13.	The gas engines will be constructed within a suitably designed building, utilising appropriate acoustic attenuation systems to provide the necessary level of noise control and meet the Sound Power Levels utilised for modelling purposes in the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008.	7.2.4
14.	Continue to monitor noise levels to ascertain compliance with criteria in the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008.	7.2.4
15.	A combined sound power level of 102 dBA from all engines, except standby units, when measured according to AS1217 (or equivalent) will be utilised for design purposes to meet modelled predictions.	7.2.3
Air Quality & Greenhouse		
16.	The gas engine exhaust stacks will be designed and built to Australian Standards to at least 10 m in height to minimise any adverse air quality impacts on neighbouring landowners and ensure the necessary emission dispersion.	7.3.3
Water		
17.	During construction, temporary sediment and erosion controls will be installed around the proposed gas engine area, ballast borehole site and along the access track as necessary.	7.4.1
18.	Following completion of construction of the ballast borehole, any disturbed areas (including any bunding) will be topsoiled, revegetated and rehabilitated in accordance with the Department of Primary Industries' guidelines.	7.4.1
19.	All water discharges shall be undertaken in compliance with the licensing conditions of the Environmental Protection Licence.	7.4
Flora & Fauna		
20.	The small pond in the ballast borehole survey area will not be disturbed as it may provide potential habitat for native and migratory water bird species.	7.5.4
21.	Erosion and sediment control structures and management procedures shall be constructed to minimise impacts to aquatic habitat and wetland areas within or surrounding the areas proposed for the ballast borehole and gas engines' sites.	7.5.4

22.	The Vegetation Clearance Procedure provided in Table 24 of the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008 shall be utilised as required for the clearance of any hollow-bearing trees.	7.5.4
Aboriginal Heritage		
23.	Members of the Aboriginal community will be invited to be present to inspect topsoil stripping activities.	7.6.4
24.	Relevant training commensurate with job descriptions will be provided to employees and contractors of Mandalong Mine in relation to Aboriginal heritage.	7.6.4
25.	Should items of Aboriginal heritage be encountered during works, the Procedure shown in Section 7.6.4 of the Mandalong Mine Modification to Consent Environmental Assessment dated September 2008 will be implemented.	7.6.4
Visual & Lighting		
26.	Tree screening shall be developed to ensure that visual and lighting impacts to the neighbouring residences are appropriately managed.	7.8.4
27.	Visual screening to be implemented between the ballast borehole and the properties of receivers 82 and 115 in order to reduce visual impacts will consider bunding and vegetation screens as required.	7.8.4
28.	The materials used for the construction of the gas engines and the ballast borehole will consist of natural colour schemes to blend in with the natural environment with no reflective materials used.	7.8.4
29.	Consideration will be given to the location of residences and road users to ensure that any lighting requirements for the various components of this Modification will be directed away from these receivers to minimise any adverse effects.	7.8.4
Traffic & Transport		
30.	The design and construction of the intersection and culvert at the Mandalong Road and ballast borehole site entrance will be undertaken in consultation with Lake Macquarie City Council prior to works commencing.	7.9.3
31.	A Section 138 approval under the Roads Act will also be sought prior to any roadwork being undertaken on Mandalong Road.	7.9.3
32.	Relevant training will be provided to all operators at the ballast borehole site during construction and operation which will include (at least) instruction on safe driving practices.	7.9.3
Preliminary Hazard Analysis		
33.	Relevant management safeguards for all possible off-site impacts identified in the PHA for the gas engines shall be implemented at Mandalong to reduce any potential risks.	7.10.3