

**Duralie Coal Mine - Department of Planning and Infrastructure Audit Dec 2013**
**Response to Recommendations**

\*Final report provided by DoPI 6-Dec-13.

\*Note that compliance items must be addressed.

\*Note that the content of recommendations and potential improvements provided in this section are advisory and require further investigation and consideration.

<b>Compliance</b>					
<b>Condition</b>	<b>Action</b>	<b>Responsible Persons</b>	<b>Due Date</b>	<b>Completion Date</b>	<b>Comment/Response</b>
Condition 8 Schedule 3	Relocate AAAB2 (Mahony) blast monitor to better reflect residence on privately owned land.	Michael Plain	31-Dec-13		Pending EPA and DoPI approval. A Blast Management Plan modification will be submitted to address the change of monitoring location.
Condition 25 Schedule 3	Improve sediment control works associated with Clareval North diversion.	Michael Plain	7-Nov-13	7-Nov-13	DoPI was advised on completion of works.
Condition 44 Schedule 3	Lodge a conservation bond. This bond can be adjusted, if required, post offset securing mechanism being agreed.	Michael Plain	31-Dec-13	23-Dec-13	Final bond lodged with DoPI. Confirmation received 23-Dec-13.
Condition 48 Schedule 3	Maintain fortnightly upload of train performance data and clarify the number of train movements each day and time provided relates to one shuttle received after 10pm.	Simon Budden	6-Dec-13	6-Dec-13	Item addressed. Register will be maintained fortnightly.
Condition 10 Schedule 5	Maintain monthly upload of complaints register	Community Liaison	6-Dec-13	6-Dec-13	Item addressed. Register will be maintained monthly.

<b>Recommendations</b>					
<b>Condition</b>	<b>Action</b>	<b>Responsible Persons</b>	<b>Due Date</b>	<b>Completion Date</b>	<b>Comment/Response</b>
Condition 24(b) Schedule 3 (Noise)	Lack of correlation between measured and calculated inversion strength. It is recommended that a long term review of temperature lapse rate data and methodologies be completed to determine implications for data use for noise monitoring interpretation and development of predictive noise tools.	Michael Plain	N/A	N/A	DCPL will continue to use the temperature lapse rate measured directly from the inversion towers located onsite for the interpretation of monitoring results and real-time noise modelling. Additionally, correlation between the measured and calculated inversion strengths will continue to be included in the noise survey reports.
Condition 13 Schedule 2 (mobile plant)	Ensure equipment that fails sound power testing is maintained and re-tested or operational controls employed to limit operation.	Simon Budden	Monitoring annually		DCPL commission mobile plant monitoring of the entire fleet (available at time of monitoring) on an annual basis and report on the results. Any equipment that fails to meet the modelled sound power levels from the Duralie Extension Project Environmental Assessment will firstly have the result verified, then action will be taken to either rectify the problem or limit the operation of the equipment. The Next scheduled monitoring is in March 2014. All new plant is tested as soon as practicable.
Blast Management Plan	Consider the following controls be included in the Blast Management Plan:				
	· Advise the DP&I in writing, as soon as practicable, of the terms of agreements with relevant landowners to exceed the blasting criteria (Condition 8 Schedule 3). Until such advice is provided to the DP&I the criteria provided in Table 4 apply.	Tony Dwyer	Feb-14		Advice will be provided in February 2014 as per DoPI correspondence.
	· Implementing a robust blast fume management strategy which includes the classification and management of fume from all blasts, with reference to the <i>Australian Explosives Industry and Safety Group Code of Practice, PREVENTION and MANAGEMENT OF BLAST GENERATED NOx GASES IN SURFACE BLASTING Edition 2, August 2011</i> . (Condition 13(a) Schedule 3)	Michael Plain	6-Mar-14		Will be included in review of the Blast Management Plan.
	· A blast vibration wavefront reinforcement model should be utilized for all shots to ensure receivers are not impacted. (Condition 13(a) Schedule 3)	Michael Plain	6-Mar-14		Will be included in review of the Blast Management Plan.

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	Any properties that have been surveyed and investigated could be listed in Blasting Management Plan (Condition 11 and 12, Schedule 3).	Michael Plain	6-Mar-14	31-Dec-13	No written requests have been received for property inspections or investigations. Details can be included in review of the Blast Management Plan.
Condition 15(b) Schedule 3	Continue to attempt negotiations with land owner and notify DP&I of strategy. (Sheryl White)	Tony Dwyer	Ongoing		DCPL will notify DoPI of any advancements in negotiations with Sheryl White.
Water Management Plan	Check published date on website.	Michael Plain	31-Dec-13	31-Dec-13	Published date updated on website.
Water	Reroute VC1 the pipe to avoid/minimise crossing of clean water diversion and protection (e.g. sleeving, flow meter alarms).	Simon Budden/Paul Kellner	31-Jan-14		An alternate route for the pipe within dirty water areas has been selected. The pipe will be relocated as soon as access to this area dries out enough to allow equipment to complete works.
Water	Wall stability of RS6 dam. Engineer and rectify wall.	Simon Budden	31-Dec-13	31-Dec-13	Some remedial repairs undertaken and will review options for further repairs.
Water	Spilt ROM coal at train bin: Utilise an alternate area for temporary stockpiling of spilt ROM coal/ Create a barrier to the Coal Shaft Creek diversion (clean water).	Simon Budden	31-Dec-13	31-Nov-13	Bund established around temporary coal stock pile to create a barrier to Coal Shaft Creek.
Condition 30 Schedule 3 (Giant Barred Frog)	Duralie are recommended to include results of the Giant Barred Frog Monitoring in the Annual Review.	Michael Plain	Jun-14		Giant Barred frog results will be included in the 2014 Annual Review and all Annual Reviews thereafter.
Rehabilitation	It is recommended that final landform design remains generally consistent within the limitations of the maximum height of the waste rock emplacement (between 110 to 120 m AHD i.e. similar scale to the existing Tombstone Hill) but includes visible relief (+/- 20m RL). This will require consultation with DRE and DP&I (Section 5.3.2 of the Rehabilitation Management Plan).	Roger Biddle	Ongoing		Rehabilitation will continue to be undertaken generally in accordance with the Duralie Extension Project EA, Rehabilitation Management Plan and MOP. DCPL will consider the inclusion of +/-20m relief in rehabilitation designs in any future modifications and provide any such modifications to DRE and DoPI for approval.
Waste	Consider signage at the bioremediation area to define operation (Section 5.5 of the WMP).	Simon Budden	31-Dec-13	31-Dec-13	Signage is in place at the bioremediation area, including delineation of cells. An operation and maintenance manual and a register is located at the bioremediation area to track contaminated material and ensure correct operation.
Condition 52(b) Schedule 3	Dispose of scrap tyre within the pit and maintain register of disposal location and tyre serial numbers. Should not exceed 50t storage.	Simon Budden	31-Mar-14		Tyres are currently being used as a safety bund. DCPL will remove these and replace with earth bund. A register of tyre disposal within the pit is currently maintained, including the quantity and location of tyres. There is no requirement to record serial numbers of tyres disposed.
Condition 3 Schedule 5 (Annual Review)	Clarifying with Department as to which reporting year the consent refers to.	Michael Plain	Jun-14		This will be addressed with the 2014 Annual review.

**Potential Improvements**

Condition	Action	Responsible Persons	Due Date	Completion Date	Comment/Response
General	Consider revision of the EMS and other relevant documentation to address the following:				
	Website published Train Performance Summary should include a complete 12 month period to allow rolling 12 month averages to be calculated. Include the dispatch time in the Train Performance Summary on website. (Condition 7(c) Schedule 2)	Simon Budden	31-Dec-13	31-Dec-13	The requirement to publish train data was placed on Duralie in Nov 2012. Data exists on the website from this time as per the requirement. Dispatch time is not required to be published on the website only the number of trains dispatched each day. Changes have been made to the Train Performance Summary and has been updated on the website.
	It is noted that the amount of coal transported per month is provided in the Annual Reviews, however these reports are prepared for financial year periods and Condition 48 Schedule 3 requires calendar year reporting. Consider alignment with next modification or changes to reporting.	Tony Dwyer	31-Dec-13	31-Dec-13	DCPL preferentially prepare Annual Reviews on a financial year basis. DCPL will record the monthly coal transported in the shuttle train performance summary to satisfy Condition 48 schedule 3.

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General EMP's	· Most of the Environmental Management Plans (EMP) require consultation with a range of government agencies as conditions of the PA, consider including evidence of consultation for each plan as an appendix in each Management Plans, in particular HMP. A summary table of specific consultation may suffice.	Michael Plain	6-Mar-14		DCPL will include any specific correspondence in reviews of the Environmental Management Plan. Summary tables of the Environmental Management Plan correspondence are already included on the first page of EMP's.
NMP	Consider revising the NMP and current practices to include the following:				
	· Regular attended noise monitoring in Wards River village (source of complaint in 2012/13).	Michael Plain	Jan-13		Additional Wards River Village noise monitoring will be included in the January 2014 noise survey and an assessment made on the need for ongoing monitoring.
	· Ensure all commitments in the NMP are measurable and reflect current practices. (Condition 6(b) Schedule 3)	Michael Plain	6-Mar-14		Will be included in review of the Noise Management Plan.
	· Consider suitability of also including linear scale targets for sound power assessments as a better reflection of the noise that will propagate to receptors. (Condition 7(c) Schedule 3)	Michael Plain	Mar-14		Advice has been requested from DCPL's noise consultant with the outcome to be addressed in the Mar 2014 mobile plant monitoring.
	· Review inputs of noise model, including current mine plans to provide more accurate modelling results.	Tony Dwyer	31-Dec-13	31-Dec-13	Noise model inputs were reviewed in 2013 during implementation of the real-time noise system.
	· Provide further training of shuttle train operators regarding horn blast protocols.	Simon Budden	N/A	N/A	DCPL have considered and advise no further training is required. In order for a train driver to be authorised on the line they must know the protocols for use of train horns at level crossings. Toolbox talks have already been undertaken to reinforce compliance with the Rail Safety Act as well as minimising impact on Wards River Residents.
	· As suggested by Vipac, (July 2013 report, Section 6.8.4) clarify in the NMP if the LAeq criteria of 65dB(A) is for train pass by period (typically 1-3 minutes) or for a fifteen minute period.	Michael Plain	6-Mar-14		Will be included in review of the Noise Management Plan.
Blasting	Consider Publishing the blasting information hotline on the DCM website (Condition 13b, Schedule 3,).	Michael Plain	31-Dec-13	31-Dec-13	Blasting hotline information has been published on the DCM website.
AQMP	Consider:				
	· Efficiencies to reduce ROM coal rehandle (Savings of GHG emissions (through increased energy efficiency, reduced fuel consumption) are achieved by mine planning decisions which minimise rehandle of ROM coal). (Condition 18 Schedule 3)	Simon Budden	Ongoing		Rehandle of coal is always the least preferred option but is required on occasions to meet operational requirements. Where possible operational efficiencies will be achieved through reduce ROM coal rehandle.
	· Including the review of GHG/Energy related projects and effectiveness of mitigation measures in the Annual Review. (Condition 18 Schedule 3)	Tony Dwyer	Jun-14		GHG and Energy related projects are components of DCPL's EEO and NGRS reporting programs. DCPL will consider the inclusion of a summary in the Annual Review.
	· Utilizing excess water for improved dust mitigation within the operation, such as fixed sprinkler road watering or water foggers on active dig faces. (Condition 18 Schedule 3)	Simon Budden	N/A	N/A	The use of fixed sprinkler road watering systems has been considered in the past and not pursued due to relatively high capital cost, short mine life and challenges with managing correct dosage rates on the haul roads. As such DCPL will continue haul road dust suppression utilising 2 water carts. DCPL are currently focusing the use of foggers on waste dump areas. Other applications for the foggers may be trailed in the future.
Water	Consider the following water related improvements:				
	· Regularly investigate alternate beneficial uses of contained mine water, such as for other industries and report in each Annual Review. This will ensure continuous improvement and allow assessment of new/changing technology and local uses.		N/A	N/A	DCPL are restricted by the current Project Approval conditions regarding the use of mine water and are committed to operating under a zero discharge policy. The use of mine water is in accordance with these conditions.

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	· Vegetation enhancement within the irrigation areas to maximize evapo-transpiration, possibly forestry land-use. (Condition 28(b) Schedule 3)		N/A	N/A	DCPL will consider potential vegetation enhancements in the irrigation areas to increase evapo-transpiration. This will be dependent on the site water balance and forecasting for the remainder of mine life.
	· Ensure mine closure planning includes the irrigation areas and water storages.	Roger Biddle	Prior to mine closure		The most effective mine closure planning can only be produced at a time prior to mine closure when the final context of the site is clear and confirmed. As described in the Rehabilitation Management Plan Section 9 the mine closure planning will cover the full scope of mining operations and be prepared in consultation with relevant stakeholders. This will necessarily include irrigation areas and water storages/final voids.
	· Removal of no longer required sediment fencing (or maintenance) at various locations across site.	Michael Plain	31-Dec-13	31-Dec-13	The removal of redundant sediment fencing commenced in December 2013 and will continue as required.
	· Maximise irrigation on Type V areas with the installation of additional irrigation blowers.	Simon Budden	31-Dec-13	12-Dec-13	Two additional irrigation blowers were installed in type V areas on 12-Dec-2014. A total of four blowers are now operating. Further blowers will be considered on a needs basis.
	· Consider the use of foggers for dust mitigation in active mining areas.	Simon Budden	N/A	N/A	Further use of irrigation blowers are being considered and the locations of these are yet to be determined. All options will be considered in the placement of these units for additional benefits such as dust mitigation.
	· Review suitability of additional irrigation areas, such as in the Unnamed Tributary catchment, and review and update of the IMP in consultation with the relevant government agencies and stakeholders.	Tony Dwyer	31-Dec-13	31-Dec-13	The use of additional irrigation areas is discussed in the Duralie Extension Project Environmental Assessment and the Irrigation Management plan. DCPL will utilise additional irrigation areas as required.
Biodiversity Management Plan	The following issues should be reviewed to improve biodiversity management:				
	· Biodiversity Management plan to consider actions beyond 3years to better reflect expected timeframes for meeting completion criteria. Consider detailed plan for 0-3 years, with broader concepts for management provided for the medium (e.g. 3-6 years) and long term periods (e.g. 6+ years). (Condition 43(d) Schedule 3)	Michael plain	6-Mar-14		Will be considered in review of the Biodiversity Management Plan.
	· Consider aligning the time frames of the Biodiversity Management Plan Performance Criteria with other reporting periods (i.e. financial years).	Michael plain	31-Dec-13	31-Dec-13	The time frames for the Biodiversity Management Plan align with the approval date of the plan and is appropriate for the reporting requirements of the Commonwealth consent.
	· Review the Giant Barred Frog Management Plan (Section 4) to better reflect that the study has been completed and provide a summary of the outcomes of the Giant Barred Frog Study (GBFSR02- A, approved by OEH, DP&I 06/03/12) as a baseline for future works. (Condition 32 Schedule 3)	Michael plain	6-Mar-14		A summary of the GBF Study is included in the GBF Management Plan which was approved in June 2012 following the GBF Study. This will be clarified in review of the Giant Barred Frog Management Plan.
Rehabilitation	Further consider:				
	· Improved bush fire prevention measures around the shuttle train rail load point (Condition 54, Schedule 3)	Simon Budden	N/A	N/A	DCPL routinely undertake controlled back-burning and slashing of fire breaks as required. Additionally DCPL are suitably equipped to respond to any fires and assist the RFS if required and considers the current measures in place suitably meet the requirements of Condition 54, Schedule 3.
	· Revegetate topsoil stockpiles as soon as possible.	Michael plain	6-Dec-13	6-Dec-13	Current practice in accordance with the Rehabilitation Management Plan is to revegetate topsoil stockpiles as soon as practicable.
HMP	Define the maintenance program for the European heritage site, Weismantel Inn, including any special tenancy requirements within the HMP.	Michael plain	6-Mar-14		Will be considered in review of the Heritage Management Plan.