

**Appendix C1
Outcomes of Happy
Valley Working Group**

(Table)

Appendix C1 Summary of outcomes of Working Party meetings conducted May 2007 - August 2008 (Table)

Main topics covered	Specific comments	Outcomes
20th September 2007 – Boyanup Public Library		
Identifying the major issues or areas of interest relating to the project and what studies were completed or underway to investigate this	Vegetation and Flora: How significant would be the loss of vegetation systems and flora? Is there a difference between local and scientific opinion, and if so, why?	Further floristic studies underway. Specialist to present results at future meeting
	Fauna: How significant would be the loss of individuals and habitat? Is there a difference between local and scientific opinion, and if so, why?	Further fauna studies underway. Specialist to present results at future meeting
	Waterways, wetlands and groundwater: What are the likely impacts of mining activity, locally and downstream, on river health, groundwater, groundwater dependent ecosystems, and infrastructure? How do local groundwater systems behave?	Hydrological review to be completed. Specialist to present results at future meeting
	Noise, Dust, Spillage and Truck Movements: How will noise and dust be controlled? How will accidental spillage at the site be contained and handled?	Specific management plans being developed. Experiences from current Gwindinup mine to be considered.
	Visual Impact: What will be visible from different perspectives, during and after mine life?	Visual impact model to be produced.
	Rehabilitation: How successful will rehabilitation be?	Independent rehabilitation review to be completed. Draft Rehabilitation plan presented with ERMP.
	Carbon Emissions: What will be the total carbon emissions for the lifetime of the mine? How can those emissions be offset?	Carbon emission model to be completed. Carbon offsets considered in environmental offset proposals.
14th November 2007 – Meadowbrook Estate, Boyanup		
Review of current issues and research in relation to fauna and flora, and how the regulatory process works to control poor performance	Fauna: It was identified that species the regulators (DEC, EPA and Commonwealth) are particularly concerned about are: Cockatoos, ring-tailed possums, chuditch, brush wallaby, bandicoot. Observed impacts on birds have to be assessed in the context of pressures on the life cycle of a species from all sources and across the full range of habitation. The presence and behaviour of fauna on the site should be studied for a reasonable amount of time. For cockatoos, nesting sites are critical, and so measuring nesting sites that will be lost by mining activity is relevant, but these birds also use the food available in the area. Perhaps loss of this will threaten cockatoos? Are there factors, other than those the company is measuring, critical to long-term of threatened species, that ought to be assessed?	Targeted surveys for threatened fauna underway. Mike Bamford to be invited to present at future meeting to describe survey techniques and survey effort at Happy Valley in relation to current best practise standards. DEC to provide further information on cockatoos

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	<p>Flora: Are the plant communities on the site are markedly different to plant communities found in the rest of the Whicher Scarp Vegetation Complex ? If they are, their loss would be more significant than if those communities are well represented in other parts of the Scarp. DEC is conducting a floristic review of the entire Whicher Scarp with the report due in late January 2008. Rehabilitation will not replace the existing native vegetation so this will be lost for good.</p>	<p>Dr Bennett to be invited to present at future meeting to describe results of vegetation mapping to address member specific comments. DEC Whicher Floristic report distributed to members when publicly available. Independent rehab review to determine rehab capability.</p>
	<p>Regulatory Process: Observation that a) the conditions set by the Minister compromise biodiversity values, b) some conditions that have local impacts (e.g. water discharge, dust, noise) are not met, from time to time, c) DEC as the regulator does not enforce the conditions swiftly enough to change the way the company operates.</p>	<p>Bring consultants in face-to-face to talk about their methods and findings, rather than having to digest technical reports; Bring DEC specialists in for face-to-face discussion, to get a better picture of how scientific expertise that is applied during assessment of mining proposals; Get a more complete picture of how the regulatory process works around specific matters (like dust and noise) that have been a concern with current minesite. DEC to present at future meeting on regulatory process in relation to dust control</p>
28th April 2008 – Meadowbrook Estate, Boyanup		
<p>Presentations by Dr Mike Bamford on fauna studies and Dr Darren Brearley on flora studies on behalf of Dr Eleanor Bennett. Potential safety risks to the community as a result of the proposal</p>	<p>Fauna</p>	<p>Survey effort extensive over many years. Meets standards outlined in EPA Guidance for terrestrial fauna surveys. In terms of specific habitat requirements yellow sands on Whicher Slopes supported higher number of reptile species. Creek lines supported higher bird numbers. Deep valleys/ riparian areas have potential for short range endemics. No cockatoo nests identified. Several Threatened or priority species observed. Management strategies discussed</p>
	<p>Flora</p>	<p>No current TEC's identified. Similarities with FCT1a, 1B and 21b On average 50 species per quadrant Significant flora Daviesia elongate and Boronia humifusa inside project area, with large populations identified outside project area. Cartis vegetation complex poorly reserved</p>
	<p>Safety Risks; Transport movements, including that entry points of minor roads to major roads being poorly signed and constructed, with the local community not well informed by Main Roads. Noise, in particular noise at night, which, when noise reduces the sleep of adjacent landholders, adds risk to their driving and use of heavy machinery. There is no significant use of the project area for recreational purposes</p>	<p>Road transport survey underway considering requirements for several options Noise modelling underway with further refinements to mine plan likely. Management plan to define noise reduction strategies and contingency</p>
5th August 2008 – Meadowbrook Estate, Boyanup		

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Neville Welsh of DEC provided an overview of noise and dust regulation for minesites.	A company is required to limit construction to reasonable noise levels, and only between 7am and 7pm. A mine license includes conditions on noise, and are documented in the approved management plan. Concerns close neighbours will suffer considerable interference during mine site construction, including loss of income where loss of sleep makes a resident unfit to use heavy machinery. In the event of noise thought to be excessive, DEC consults the company, reviews records and can act to take independent measures of noise, using equipment and procedures that meet Australian standards. Prosecution may follow if significant breaches identified. With dust, DEC uses limits developed for similar mine operations as a guide, and sets limits specific to each mine, after negotiation with the mine operator. Particulate less than 10 microns is associated with burning, and over 10 microns, with disturbance of earth causing visible dust. Incident investigation procedure similar to noise.	A list of company commitments relating to dust, noise and water, made via Ministerial Statement 718, Environmental Management Plans and the Works Approval for the Gwindinup Project (covering construction phase activities). made available Noise modelling results and noise management plan to be presented. Individual neighbour concerns to be discussed directly with Company
Scientists from Parsons Brinkerhoff presented the findings of the hydrological and Acid Sulphate Soil (ASS) studies	ASS identified as low risk. Recommended monitoring of material intended for capping stockpiles of soil. Depth of the mine pit would be higher than the groundwater system, and therefore no impact on groundwater dependent ecosystems and groundwater users.	Ground and surface water management plan to incorporate PB recommendations on ASS and hydrology.
Bemax's development engineer provided an overview of the latest mine plan, describing further changes to reduce environmental impact.	Impacts from mining will be reduced by storing excavated material on cleared land, and by running the Gwindinup South and Happy Valley South mine sites in tandem, reducing the movement of soils, the storage time of topsoil, the length of time to complete extraction at both sites and the amount of land required for roadways. Bunding to reduce noise is being designed for the north and west side of Lot 215.	Mine plan to be discussed further following Agency review.