

# Attachment 11

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Consultant's Environmental Objectives Assessment

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Client:	Hanson Construction Materials Pty Ltd	Project:	Extension to Wolffdene Quarry
File Ref.:	1001_DA2_310_013		
Development Proposal:	Material Change of Use (MCU) – Extension to Extractive Industry at Harts Road, Luscombe (the Site)		
Environmental Authority Application Type:	Single application for Site-specific Application		
Prepared By:	Andrew Lyndon, Manager Planning and Environment		

This Environmental Objective Assessment has been prepared to assist the administering authority in their assessments of the environmentally relevant activities of this Site-specific Environmental Authority Application. The Environmental Objective Assessment has been made against the environmental objective and performance outcomes prescribed in schedule 5, part 3, tables 1 and 2 of the *Environmental Protection Regulation 2008*.

Table 1 – Operational Assessment

Environmental Objective	Performance Outcomes	Assessment */✓/na	Comments
<b>Air</b>			
The activity will be operated in a way that protects the environmental values of air.	1. There is no discharge to air of contaminants that may cause an adverse effect on the environment from the operation of the activity.	✘	Site activities have the potential to generate emissions of dust particulates however emissions will be managed to acceptable standards (refer below).
	2. All of the following— (a) fugitive emissions of contaminants from storage, handling and processing of materials and transporting materials within the site are prevented or minimised;	✓	Strategies/mitigation measures implemented on-site are provided in Section 3.2 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(b) contingency measures will prevent or minimise adverse effects on the environment from unplanned emissions and shut down and start up emissions of contaminants to air;	✓	The initial corrective actions are provided in Section 3.2 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(c) releases of contaminants to the atmosphere for dispersion will be managed to prevent or minimise adverse effects on environmental values.	✓	A Noise and Dust Assessment has been prepared for the Site which demonstrates that the proposed development can occur, with appropriate mitigation measures, without causing unreasonable adverse effects on nearby sensitive receivers (refer to Attachment 6 – Noise and Dust Impact Assessment of the Planning Assessment Report). Site management protocol relating to dust emissions (including management strategies/mitigation measures, monitoring and initial corrective actions) is provided in Section 3.2 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
<b>Water</b>			
The activity will be operated in a way that protects environmental values of waters.	1. There is no actual or potential discharge to waters of contaminants that may cause an adverse effect on an environmental value from the operation of the activity.	✘	Site activities involve the capture and treatment of stormwater prior to release to the receiving environment however, the activities have the potential to impact on overland flow water quality that could cause an adverse effect on environmental values of the receiving environment (especially during large rainfall / flood events).

Environmental Objective	Performance Outcomes	Assessment */✓/na	Comments
	2. All of the following— (a) the storage and handling of contaminants will include effective means of secondary containment to prevent or minimise releases to the environment from spillage or leaks;	✓	Applicable strategies/mitigation measures implemented on-site are provided in Section 3.1 of the SBMP for stormwater contamination management, and handling/storing of hydrocarbons and chemicals on-site respectively (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(b) contingency measures will prevent or minimise adverse effects on the environment due to unplanned releases or discharges of contaminants to water;	✓	Applicable strategies/contingency measures implemented on-site are provided in Section 3.1 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(c) the activity will be managed so that stormwater contaminated by the activity that may cause an adverse effect on an environmental value will not leave the site without prior treatment;	✓	Site management protocol relating to stormwater management (including management strategies/mitigation measures, monitoring and corrective actions) is provided in Section 3.1 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(d) the disturbance of any acid sulphate soil, or potential acid sulphate soil, will be managed to prevent or minimise adverse effects on environmental values;	na	The Site is located at an elevation between 35 m and 297 m Australian Height Datum (AHD). The Site is not susceptible to acid sulphate soils or potential acid sulphate soils.
	(e) acid producing rock will be managed to ensure that the production and release of acidic waste is prevented or minimised, including impacts during operation and after the environmental authority has been surrendered;	na	The Site is not located at or near an area where acid producing rock have previously been identified or within a prospective land zone containing acid producing rock.
	(f) any discharge to water or a watercourse or wetland will be managed so that there will be no adverse effects due to the altering of existing flow regimes for water or a watercourse or wetland;	✓	Site management protocol relating to stormwater management (including management strategies/mitigation measures, monitoring and corrective actions) is provided in Section 3.1 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(g) for a petroleum activity, the activity will be managed in a way that is consistent with the coal seam gas water management policy, including the prioritisation hierarchy for managing and using coal seam gas water and the prioritisation hierarchy for managing saline waste;	na	Site operations are not a petroleum activity.
	(h) the activity will be managed so that adverse effects on environmental values are prevented or minimised.	✓	Site management protocol relating to stormwater management (including relevant environmental values, management strategies/mitigation measures, monitoring and corrective actions) is provided in Section 3.1 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
<b>Wetlands</b>			
The activity will be operated in a way that protects the environmental values of wetlands.	1. There will be no potential or actual adverse effect on a wetland as part of carrying out the activity.	✓	There are no wetlands in the vicinity of the project.
	2. The activity will be managed in a way that prevents or minimises adverse effects on wetlands.	na	
<b>Groundwater</b>			
The activity will be operated in a way that protects the environmental values of groundwater and any associated surface ecological system.	1. Both of the following apply— (a) there will be no direct or indirect release of contaminants to groundwater from the operation of the activity; (b) there will be no actual or potential adverse effect on groundwater from the operation of the activity.	✓	The proposed development will avoid the groundwater table and there will be no direct or indirect releases of contaminants to groundwater. The proposed quarry floor is located at an elevation of 40 m AHD which is well above the groundwater table.
	2. The activity will be managed to prevent or minimise adverse effects on groundwater or any associated surface ecological systems. <i>Note— Some activities involving direct releases to groundwater are prohibited under section 56 of this regulation.</i>	na	

Environmental Objective	Performance Outcomes	Assessment */✓/na	Comments
<b>Noise</b>			
The activity will be operated in a way that protects the environmental values of the acoustic environment.	1. Sound from the activity is not audible at a sensitive receptor.	x	Site activities have the potential to generate noise emissions however emissions will be managed to acceptable standards (refer below).
	2. The release of sound to the environment from the activity is managed so that adverse effects on environmental values including health and wellbeing and sensitive ecosystems are prevented or minimised.	✓	A Noise and Dust Assessment has been prepared for the Site which demonstrates that the proposed development can occur, with appropriate mitigation measures, without causing unreasonable adverse effects on nearby sensitive receivers (refer to Attachment 6 – Noise and Dust Impact Assessment of the Planning Assessment Report). Site management protocol relating to noise and blasting (including management strategies/mitigation measures, monitoring and initial corrective actions) is provided in Section 3.3 and 3.4 respectively of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
<b>Waste</b>			
Any waste generated, transported, or received as part of carrying out the activity is managed in a way that protects all environmental values.	1. Both of the following apply— (a) waste generated, transported or received is managed in accordance with the waste and resource management hierarchy in the Waste Reduction and Recycling Act 2011; (b) if waste is disposed of, it is disposed of in a way that prevents or minimises adverse effects on environmental values.	✓	Site management protocol relating to waste (including management strategies/mitigation measures, monitoring and corrective actions) is provided in Section 3.6 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
<b>Land</b>			
The activity is operated in a way that protects the environmental values of land including soils, subsoils, landforms and associated flora and fauna.	1. There is no actual or potential disturbance or adverse effect to the environmental values of land as part of carrying out the activity.	x	Site operations will involve clearing of vegetation and the disturbance of land, soils, subsoils and landform.
	2. All of the following— (a) activities that disturb land, soils, subsoils, landforms and associated flora and fauna will be managed in a way that prevents or minimises adverse effects on the environmental values of land;	✓	Site management protocol relating to landcare and site rehabilitation is provided in Section 3.9 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(b) areas disturbed will be rehabilitated or restored to achieve sites that are— (i) safe to humans and wildlife; and (ii) non-polluting; and (iii) stable; and (iv) able to sustain an appropriate land use after rehabilitation or restoration;	✓	The Landcare and Rehabilitation strategies in the SBMP is to return the land to a safe, stable, non-polluting and self-sustaining state suitable for the desired long-term land use (e.g. grazing) at the cessation of the quarrying operations (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report)..
	(c) the activity will be managed to prevent or minimise adverse effects on the environmental values of land due to unplanned releases or discharges, including spills and leaks of contaminants;	✓	Refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report.
	(d) the application of water or waste to the land is sustainable and is managed to prevent or minimise adverse effects on the composition or structure of soils and subsoils.	na	No application of contaminated water is likely to have adverse effects on the composition or structure of the soils and subsoils as a result of Site operations. Wastes will not be buried on the Site.

Table 2 – Land Use Assessment

Environmental Objective	Performance Outcomes	Assessment */✓/na	Comments
<b>Site Suitability</b>			
The choice of the site, at which the activity is to be carried out, minimise serious environmental harm on areas of high conservation value and special significance and sensitive land uses at adjacent places.	1. Both of the following apply— (a) areas of high conservation value and special significance likely to be affected by the proposal are identified and evaluated and any adverse effects on the areas are minimised, including any edge effects on the areas; (b) the activity does not have an adverse effect beyond the site.	✘	Site activities have the potential to generate noise and dust emissions however emissions will be managed to acceptable standards (refer below).
	2. Both of the following apply— (a) areas of high conservation value and special significance likely to be affected by the proposal are identified and evaluated and any adverse effects on the areas are minimised, including any edge effects on the areas;	✓	<p>Planning for the proposal has involved the consideration of environmental, physical and operational constraints to evolve a preferred option of site development and progressive rehabilitation.</p> <p>Biodiversity, Assessment and Management Pty Ltd (BAAM) have prepared a Targeted Flora and Fauna Assessment for the Site which confirms the Site moderate to high ecological values (refer to Attachment 3 – Targeted Flora and Fauna Assessment of the Planning Assessment Report).</p> <p>The BAAM Report finds:</p> <p><i>"with suitable rehabilitation planning and management of retained habitats potential detrimental ecological impacts of the proposed activity can be effectively managed without resulting in significant impact to local ecological values."</i></p> <p>The clearing of native vegetation is generally assessable development for which a development permit under the SPA is required (in accordance with Schedule 3, Part 1, Table 4, Item 1 of the Sustainable Planning Regulation 2009 (SPR)), unless the clearing falls within the scope of Schedule 24 of the SPR.</p> <p>Schedule 24, Part 2, Item (g) of the SPR includes clearing of the following type on freehold land –</p> <p><i>for urban purposes in an urban area and the vegetation is regulated regrowth vegetation, or an of concern regional ecosystem or a least concern regional ecosystem—</i></p> <p>(i) <i>shown on a PMAV for the area as a category B area; or</i></p> <p>(ii) <i>if there is no PMAV for the area—shown on the regional ecosystem map or remnant map as remnant vegetation.</i></p> <p>Correspondence (via email from Patrina Birt – Vegetation Management Officer) from Department of Natural Resources and Mines (DNRM) dated 13 August 2012 confirmed that the proposed clearing for the application is exempt under Schedule 24, Part 2 of SPR (refer to Attachment 12 – DNRM Vegetation Clearing Exemption Correspondence of the Planning Assessment Report).</p>
	(b) critical design requirements will prevent emissions having an irreversible or widespread impact on adjacent areas.	✓	A Noise and Dust Assessment has been prepared for the Site which demonstrates that the proposed development can occur, with appropriate mitigation measures, without causing unreasonable adverse effects on nearby sensitive receivers (refer to Attachment 6 – Noise and Dust Impact Assessment of the Planning Assessment Report). Site management protocol relating to air quality, noise and blasting (including management strategies/mitigation measures, monitoring and initial corrective actions) is provided in Section 3.2, 3.3 and 3.4 respectively of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).

Environmental Objective	Performance Outcomes	Assessment */✓/na	Comments
<b>Location on Site</b>			
The location for the activity on a site protects all environmental values relevant to adjacent sensitive uses.	1. The location for the activity means there will be no adverse effect on any environmental values.	x	Site activities have the potential to generate noise and dust emissions however emissions will be managed to acceptable standards (refer below).
	2. Both of the following apply— (a) the activity, and components of the activity, are carried out on the site in a way that prevents or minimises adverse effects on the use of surrounding land and allows for effective management of the environmental impacts of the activity;	✓	Site management protocol relating to noise and air quality (including management strategies/mitigation measures, monitoring and initial corrective actions) is provided in Sections 3.2 and 3.3 of the SBMP (refer to Attachment 4 – Site Based Management Plan of the Planning Assessment Report).
	(b) areas used for storing environmentally hazardous materials in bulk are located taking into consideration the likelihood of flooding.	✓	The Site is not subject to flooding.
<b>Critical Design Requirements</b>			
The design of the facility permits the operation of the site, at which the activity is to be carried out, in accordance with the best practice environmental management.	1. The activity does not involve the storage, production, treatment or release of hazardous contaminants, or involve a regulated structure.	✓	The activity does not involve additional storage, production, treatment or release of hazardous contaminants, or involve a regulated structure.
	2. All of the following apply— (a) all storage provided for hazardous contaminants includes secondary containment to prevent or minimise releases to the environment from spillage or leaks;	na	
	(b) regulated structures comply with the 'Manual for Assessing Hazard Categories and Hydraulic Performance of Dams' published by the department;	na	
	(c) provide containers for the storage of hazardous contaminants that are secured to prevent the removal of the containers from the site by a flood event;	na	
	(d) the design of the facility prevents or minimises the production of hazardous contaminants and waste;	na	
	(e) if the production of hazardous contaminants and waste is not prevented or minimised under paragraph (d)—the design of the facility contains and treats hazardous contaminants rather than releasing them.	na	