

ASSESSMENT REPORT

Rockley Falls Quarry - Modification Wet-Mix Batch Plant and Extended Operating Hours (07_0078 MOD 5)

BACKGROUND

Abigroup Contractors Pty Limited (Abigroup) owns the Rockley Falls Quarry, located 4 kilometres (km) northeast of the village of Holbrook and 60 km north of Albury-Wodonga, in the Greater Hume local government area (see Figure 1).



Figure 1: Rockley Falls Quarry local and regional context

The quarry was approved by the Minister in June 2008 and is operated by the Hume Highway Woomargama Alliance (HHWA), a consortium consisting of Abigroup, RTA and SKM. Extracted material is used by HHWA to construct the duplication of the Hume Highway between the townships of Woomargama and Tabletop. The Minister's approval:

- allows production of up to 700,000 tonnes per annum (tpa) of hard rock quarry product until 2012 and 100,000 tpa from 2012 until 2028; and
- requires rehabilitation of the site post extraction.

PROPOSED MODIFICATION

On 2 February 2011, Abigroup asked the Minister to modify the project approval for the Rockley Falls Quarry under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Abigroup proposes to establish a temporary wet-mix concrete batch plant within the existing aggregate stockpile area for the site (see Figure 2), adjacent to the existing approved dry-mix batch plant. Following a 30 day commissioning period, the wet-mix batch plant would be used for approximately 90 days to supply 21,000 m³ of concrete for the construction of a section of the Hume Highway Duplication Project.

Abigroup also proposes to extend operation of the quarry and batch plant for an hour each side of the approved operating hours (ie 6am to 7pm) Monday to Friday. This extension would apply during the operation of the wet-mix batch plant to enable the delivery of concrete to the highway upgrade site by 7am.



Figure 2: Proposed Wet-Mix Batch Plant Location

STATUTORY CONTEXT

Approval Authority

The Minister was the approval authority for the original project application, and is consequently the approval authority for the modification application. However, the Director-General, may determine the application under the Minister's delegation of 25 January 2010.

Modification

The proposed modification does not involve changes to any of the quarry's major operating functions or approved extraction volume. The Department is satisfied that the proposed modification falls within the scope of Section 75W of the EP&A Act and may therefore be determined.

Consultation

Under Section 75W of the EP&A Act, the Department is not required to exhibit the modification application or undertake consultation. Notwithstanding, the Department referred the modification application to the Department of Environment, Climate Change and Water (DECCW). DECCW does not object to the proposal.

CONSIDERATION OF ISSUES

The Department has assessed the modification application in accordance with the relevant requirements of the EP&A Act. The key environmental issues for the application are discussed below.

Issue	Consideration
Noise	The proposed modification would potentially increase the noise from the site due to extended operating hours and operation of the wet-mix batch plant, which includes loading and handling of aggregate and additional heavy vehicle movements.
	The EA notes that crushing operations at the quarry would not occur outside the approved operating hours, and that activities to be undertaken during the additional 2 hours on weekdays would consist mainly of preparing plant and equipment. Furthermore, the EA predicted crushing operations would cease at the end of March, as by that stage Abigroup would have sufficient crushed material to supply the highway upgrade site and batch plants. Crushing at the site ceased in mid March.

Issue	Consideration
	The EA includes noise modelling of the proposed modified project. This modelling found that the proposed modification would not result in any exceedances of the project's noise criteria. The increase in noise levels as a result of the modification is therefore not considered to have a significant impact on noise levels at surrounding residences.
	The Department notes that the project approval includes the provision for the approved operating hours to be varied with written consent if the Director-General is satisfied that the amenity of residents in the local area would not be adversely affected. As the proposed activities to be undertaken outside approved hours would primarily comprise vehicle movements, maintenance and preparation of machinery at the quarry for up to 4 months, the Department is satisfied that the amenity of surrounding residents would not be adversely affected. The Department is therefore satisfied that the proposal is unlikely to result in any significant noise-related impacts at surrounding sensitive receivers.
Air Quality	The proposed modification would potentially increase the generation of airborne particulates through the handling of raw materials which feed the batch plant, and the movement of vehicles. No additional surface disturbance is proposed.
	These activities are far enough away from surrounding sensitive receivers (the nearest residence is <i>Beenly</i> , at 1400 m) that any increase in dust would be insignificant.
	As noted above, the conclusion of crushing operations (a key dust-generating activity) in March would likely reduce the level of dust emitted from the site.
	The quarry currently implements a dust management plan and monitors dust levels at a number of locations around the quarry. Air quality monitoring has shown that operations to date have generally met air quality criteria.
	DECCW agrees that the modification is unlikely to increase dust related impacts from the site. The Department is therefore satisfied that impacts on air quality as a result of the proposed modification would be minimal.
Traffic	The wet-mix batch plant is predicted to produce an average of 750 m ³ and a maximum of 1,300 m ³ of concrete per day, resulting in an average of 11 hourly (125 daily) and a predicted maximum of 20 hourly (216 daily) outbound truck movements. However, these truck movements would be offset by reduced dispatches of crushed aggregate, sand and dry mix for use in off-site concrete production for the Highway duplication project.
	Consequently, Abigroup predicts an overall maximum of 24 outbound truck movements from the site per hour, which is an increase of 4 movements above the maximum predicted in the original EA. In addition, the wet mix plant is only intended to operate for a period of 90 days, and the periods of peak concrete production would be even shorter. The Department is satisfied that the modification would not result in any significant traffic-related impacts and that any such impacts can be managed through existing conditions of approval.
Water	The EA predicts the operation of the wet-mix batch plant would require between 75,000 and 130,000 litres/day of additional water. This water would be sourced from the quarry's existing licensed bore and stored in two new water storage tanks adjacent to the wet-mix batch plant. The EA found that the total volume of water used on-site would remain below the licensed allocation of the quarry's groundwater bore.
	The concrete batching process would generate approximately 2000 L per day of waste water, with additional wastewater generated from truck washing. Abigroup proposes to install additional controls to capture and treat this water for recycling and/or release into the existing sedimentation basin on site. DECCW in its submission noted that any water to be discharged would need to comply with the existing limits in the site's environment protection licence.
	Abigroup has proposed that the existing management plans applying to landforms on site, including the Erosion and Sediment Control Plan, would be reviewed and, if necessary, updated to reflect the modification.
	The Department and DECCW are satisfied that the application contains sufficient assessment of potential water management issues and that any water related impacts would be minimal.
Visual	The wet-mix batch plant would result in minor, temporary increases in the visibility of the quarry site from surrounding viewpoints. Visibility from the Hume Highway is considered to be minimal due to the low-lying nature of the site and the presence of trees between the quarry and the Highway.
	However, the proposed modification would slightly increase the visibility of the quarry site from the <i>Tumbarook</i> , <i>Quambatook</i> and <i>Beenly</i> residences, from each of which the existing stockpile area and dry-mix batch plant can be seen.
	The existing aggregate stockpile area where the batch plant would be located is up to 5 m in height and the dry-mix batch plant is approximately 10 m high. The wet-mix batch plant would be approximately 24 m high and 60 m long.
	The proposal to extend the hours of operation would potentially increase the impacts due to lighting of the site, particularly as the wet-mix batch plant is intended to operate during the darker months.

Issue

Consideration

The current project approval includes a requirement for Abigroup to take all practical measures to mitigate off-site lighting impacts from the project to the satisfaction of the Director-General. Abigroup proposes to continue to implement a number of measures to reduce potential lighting impacts on surrounding receivers, including use of screening vegetation, appropriately locating lighting equipment, consultation with potentially affected residents and the use of directional and low level lighting where appropriate.

Due to the level of disturbance and existing machinery used in the area, the distance from sensitive receivers, and the proposed lighting management, the Department is satisfied that any visual impacts associated with the proposed batch plant would be minimal.

Other Issues The Department is satisfied that other issues associated with the proposal are minor and can be effectively managed under the existing conditions of approval.

RECOMMENDED CONDITIONS

The Department is satisfied that the existing conditions of approval for the project are generally adequate to manage the development as modified by the application.

The Department has recommended additional conditions, including a requirement to update any strategies, plans or programs necessary to encompass the proposed modification, as well as administrative updates of certain other conditions.

Abigroup does not object to the proposed conditions.

CONCLUSION

The Department has assessed the application in accordance with the relevant requirements of the EP&A Act. The proposed modification would:

- allow for the production of concrete to be supplied for the Woomargama Bypass Project efficiently and cost-effectively;
- not cause any significant additional environmental impacts for the approved project.

The Department therefore believes that the modification is in the public interest and should be approved.

RECOMMENDATION

It is recommended that the Director-General:

- consider the findings and recommendations of this report;
- determine that the proposed modification falls within the scope of section 75W of the EP&A Act;
- approve the proposed modification under Section 75W of the EP&A Act; and
- sign the attached Notice of Modification.

Howard Reed Manager Mining Project

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David Kitto Director, Mining & Industry Projects

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Richard Pearson Deputy Director-General, Development Assessments and Systems Performance

Sam Haddad **Director-General** 64 2011