



# Environmental Protection Authority

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**EPA R&R No: 1406**

MINISTER FOR ENVIRONMENT

## **VOYAGER QUARRY, LOTS 11 & 14 HORTON ROAD, THE LAKES AVON LOCATION 1881, SHIRE OF NORTHAM – PROPOSAL TO DELETE CONDITIONS 6 AND 11, AND AMEND CONDITION 12 OF MINISTERIAL STATEMENT 706 (ASSESSMENT NO. 1863)**

I refer to your letter of 8 November 2010 requesting the Environmental Protection Authority (EPA) to inquire into and report to you under section 46(1) of the *Environmental Protection Act 1986* on BGC (Australia) Pty Ltd's proposed changes to the environmental conditions for the Voyager Quarry, Lots 11 & 14 Horton Road, The Lakes (Ministerial Statement 706). This facility is also known as Voyager II.

Section 46(1) of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for Environment on whether proposed changes to conditions and procedures of Ministerial Statements should be allowed. In addition, the EPA may make other recommendations through a section 46(1) enquiry process as required.

The following is the EPA's Report and Recommendations (No. 1406) to you pursuant to section 46(3) of the *Environmental Protection Act 1986*.

### **Introduction**

The proponent, BGC (Australia) Pty Ltd (BGC), has approval (Ministerial Statement 706, 16 December 2005) to develop and operate a quarry incorporating excavation of approximately 60 million tonnes of hard rock, approximately two million tonnes of gravel and approximately 12 million tonnes of clay from the quarry footprint (Ministerial Statement 706). BGC commenced operations at the quarry in late September 2010. On 15 October 2010, BGC submitted a section 46 application to you for enquiry into Conditions 6, 11 and 12 of Ministerial Statement 706.

The rationale provided for this application was that BGC wants to supply more quarrying product to the Western Australian market than its facility is currently capable of producing. BGC stated that it was being subjected to unreasonably restrictive operating conditions, particularly concerning limitations to hours of operation (Condition 6), and dust monitoring requirements (conditions 11 and 12). Accordingly, the proponent requested that conditions 6 and 11 be deleted, and Condition 12 be revised. Amendment of Condition 12 is proposed to remove the components of the ministerial condition which refer to Condition 11.

The ministerial conditions discussed in this report are set out below:

- 6-1 *Activities relating to quarrying, crushing and screening shall only be undertaken between the hours of 0700 and 1900 on weekdays which are not public holidays and between the hours of 0700 and 1330 on Saturdays. Activities relating to quarrying, crushing and screening must not be carried out on Sundays, public holidays or outside the permitted hours of operation required by this condition.*
- 11-1 *The proponent shall ensure that dust emissions from Lot 14 do not exceed an ambient PM10 level of 50 micrograms per cubic metre averaged over a 24 hour period when measured at the property boundary.*
- 12-1 *Prior to clearing of vegetation or excavation of soil or rock, whichever is the sooner, the proponent shall prepare a Dust Monitoring and Remedial Action Program, to the requirements of the Minister for Environment.*

*The objective of this Programme is, by monitoring dust concentrations, to ensure that dust associated with all operations (including land clearing, excavation, blasting, dust lift-off from stockpiles and general operational activities such as screening, crushing and transport) which emanates from and leaves the site complies with the standard prescribed in Condition 11-1.*

*The Programme shall include but not be limited to:*

- 1. continuous dust and meteorological monitoring;*
  - 2. ambient dust monitoring at two or more Sensitive Sites in the vicinity of the quarry (See note 1, Condition 17);*
  - 3. a reporting schedule for monitoring data and results;*
  - 4. improvements to monitoring and reporting; and*
  - 5. remedial action to be undertaken to prevent exceedances if the dust source is within the proposal area, or the dust arises from operational activities (including vehicular movements).*
- 12-2 *The proponent shall implement the Dust Monitoring and Remedial Action Programme required by Condition 12-1 and any subsequent updates as required by Condition 12-3.*
- 12-3 *The proponent shall review and update the Dust Monitoring and Remedial Action Programme required by Condition 12-1 annually.*
- 12-4 *The proponent shall report to the Department of Environment any exceedances of the standard prescribed in Condition 11-1.*
- 12-5 *The proponent shall provide a report to the Department of Environment relating to the exceedances referred to in Condition 11-1 within seven days of being recorded, identifying the sources of the dust, and, if the source is within the proposal area, or from operational activities (including vehicular movements) and indicating remedial action undertaken to prevent further such exceedances.*
- 12-6 *The proponent shall make the Dust Monitoring and Remedial Action Programme required by Condition 12-1 publicly available.*

## Background

Following the original assessment of Voyager II in 2005, the EPA concluded in Bulletin 1169 that the proposal was capable of being managed so that the EPA's objectives would not be compromised, provided that there was satisfactory implementation by the proponent of its commitments and the ministerial conditions recommended in Bulletin 1169.

A total of 15 appeals were received in relation to Bulletin 1169 and in the Appeals Decision Summary the then Minister for Environment recognised that, given the 50 year lifetime of the operation, the new quarry should be constructed and operated in a manner which ensured that the amenity of the surrounding area was not unreasonably interfered with.

The management of operational noise, vibration and dust emissions were considered to be critical in terms of the avoidance of adverse impacts on amenity.

Specifically regarding noise impact, the then Minister for Environment noted that uncertainty existed with respect to the extent to which quarrying operations associated with the proposal would meet the relevant provisions of the Environmental Protection (Noise) Regulations 1997 (Noise Regulations). When considering these concerns, it was concluded that a precautionary approach should be adopted.

Given that the potential impacts of noise emissions on surrounding residents were likely to be more significant during night-time and evening periods and on weekends and public holidays, the quarry operations were recommended to be restricted to weekday day-time hours between 7.00am and 7.00pm, and to Saturday mornings and early afternoons. The then Minister for Environment reflected the outcomes of the appeals assessment by including a condition on operating hours in Ministerial Statement 706.

With respect to concerns raised in relation to potential dust emissions, the then Minister for Environment modified two aspects of the EPA's recommended conditions in Bulletin 1169 to improve the management of impacts from quarry dust. The first related to the conversion of the current "target" for PM<sub>10</sub> of 50 micrograms of dust per cubic metre measured on a 24 hours basis to a "standard" to be complied with at nearby sensitive premises.

Secondly, in order to ensure that the dust monitoring program put in place by BGC adequately covered ambient dust levels at sensitive receptors, the program was recommended to provide for appropriate ambient dust monitoring at several sensitive premises in the vicinity of the quarry.

Condition 11 Ambient Dust Standards was added to the Ministerial Statement, and Condition 12 Dust Monitoring and Remedial Action was modified to reflect these outcomes.

## Discussion

In considering the BGC's request for amendments of the Ministerial Statement and the information provided, the EPA noted that the operations only commenced in approximately September 2010 and that more information over a longer period of time is required from the proponent to demonstrate compliance with noise and dust requirements before deletion of the ministerial conditions may be reconsidered.

The EPA did, however, support an amendment of Condition 6 Operating Hours to allow a reduced form of operation to occur during Saturday afternoons from 1:30pm to 7pm, as the Noise Regulation limits are identical for Saturday mornings and afternoons, and the proponent has advised it will only operate tertiary crushers and supporting equipment during these afternoons. Use of the tertiary crushers alone should produce less noise when compared to Saturday mornings.

The EPA considered that Condition 11 Ambient Dust Standards should remain at this stage, consistent with the regulation of sensitive premises. Nevertheless, upon completion of an acceptable program of work that demonstrates the proponent's compliance with conditions 11 and 12, the EPA may consider a review of the conditions after a period of at least 12 months of quarry operations.

The EPA also stated that the Office of the EPA should discuss with the Department of Environment and Conservation (DEC) the possible future management of dust and noise impacts by regulation and licensing, rather than by Ministerial Condition, in order to avoid duplication. A strategy to manage the relationship between the public and the proponent also needs to be discussed with the DEC.

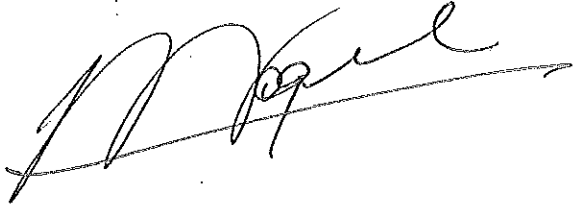
## Recommendation

It is recommended that:

1. Condition 6-1 in Ministerial Statement 706 be amended to read as follows:

*6-1 Activities relating to quarrying, crushing and screening shall only be undertaken between the hours of 0700 and 1900 on weekdays which are not public holidays and between the hours of 0700 and 1330 on Saturdays. Activities limited to the usage of the tertiary crusher and its supporting equipment can be carried out between the hours of 1330 and 1900 on Saturdays.*

2. Conditions 11 and 12 be retained, pending advice from the DEC on the future management of dust under licence conditions, and the satisfactory implementation of the Dust Monitoring and Remedial Action Programme that demonstrates compliance over the first 12 months of the quarry's operation.

A handwritten signature in black ink, appearing to read 'Dr Paul Vogel', written in a cursive style. The signature is positioned above a horizontal line that extends across the width of the signature.

**Dr Paul Vogel**  
**Chairman**

27 June 2011