



Report and recommendations of the Environmental Protection Authority



**Voyager Quarry,
Lots 11 & 14 Horton Road, The Lakes,
Avon Location 1881, Shire of Northam
– inquiry under s46 of the
Environmental Protection Act 1986 –
change to implementation conditions**

BGC (Australia) Pty Ltd

Report 1466

January 2013

**ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR
ENVIRONMENT**

**VOYAGER QUARRY, LOTS 11 & 14 HORTON ROAD, THE LAKES, AVON
LOCATION 1881, SHIRE OF NORTHAM – INQUIRY UNDER SECTION 46 OF
THE *ENVIRONMENTAL PROTECTION ACT 1986* - CHANGE TO
IMPLEMENTATION CONDITIONS (ASSESSMENT NO. 1931)**

The Minister for Environment has requested (31 May 2012) under section 46 of the *Environmental Protection Act 1986* (the EP Act) that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions relating to the Voyager Quarry proposal; Lots 11 and 14 Horton Road, The Lakes, Avon Location 1881, Shire of Northam.

The following is the EPA's Report and Recommendations (No. 1466) to the Minister pursuant to section 46(6) of the EP Act.

Background

The Voyager Quarry (Voyager II) proposal was assessed by the EPA at the level of Public Environmental Review (PER) and is subject to the implementation conditions of Ministerial Statement 706, as amended by Ministerial Statement 872. The proponent for the proposal is BGC (Australia) Pty Ltd.

In its assessment of the proposal the EPA considered the following factors required detailed evaluation in its report and recommendations:

- direct impacts on flora and vegetation;
- indirect impacts on flora and vegetation;
- vertebrate fauna;
- invertebrate fauna;
- closure and rehabilitation;
- dust;
- ground and surface water;
- noise from vegetation clearing and site preparation;
- operational noise; and
- vibration.

The EPA concluded that the proposal was capable of being managed so that the EPA's objectives would not be compromised, provided there was satisfactory implementation by the proponent of its commitments and the EPA's recommended conditions.

A total of 15 appeals were received against the EPA's Report and Recommendations, a number of them concerning potential impacts on the amenity of the surrounding area. In response to the appeals, the Minister for Environment adopted a precautionary approach to the management of operational noise, vibration and dust emissions, and modified the EPA's recommended conditions relating to those issues. The Minister approved the proposal for implementation, subject to the conditions of Ministerial Statement 706.

In October 2010 the proponent requested changes to the conditions of Ministerial Statement 706, specifically the deletion of Condition 6 (Operating Hours), the deletion of Condition 11 (Ambient Dust Standard), and amendments to Condition 12 (Dust Monitoring and Remedial Action). The Minister for Environment requested (8 November 2010) that the EPA inquire into and report on the matter pursuant to section 46 of the EP Act.

In its report to the Minister (EPA Report and Recommendations 1406) the EPA noted that the Voyager II quarry had only been operational for a short time, and recommended that more information be gathered on dust and noise emissions before the Minister considered deleting conditions 6 and 11 and amending Condition 12 as requested by the proponent.

Condition 6 restricted the operating hours of the Voyager II quarry to between 7:00 am and 7:00 pm on weekdays and between 7:00 am and 1:30 pm on Saturdays. The EPA supported an extension of Saturday operating hours for selected equipment, noting the Environmental Protection (Noise) Regulations 1997 (the Noise Regulations) set the same assigned noise level for Saturday mornings as for Saturday afternoons. Ministerial Statement 872 amends Condition 6 of Ministerial Statement 706 to allow for the use of the tertiary crusher and supporting equipment on Saturday afternoons.

The proposal is also subject to the provisions of Part V of the EP Act and requires works approvals and an operating licence.

Assessment of the proposed change to conditions

Voyager II has been operational since September 2010, and the proponent has gathered more information on the emissions of the quarry operations. The proponent has requested (16 March 2012) changes to the conditions relating to the Voyager Quarry proposal, specifically, the:

- deletion of Condition 6 - Operating Hours;
- deletion of Condition 11 - Ambient Dust Standard;
- amendment of Condition 12 – Dust Monitoring and Remedial Action; and
- deletion of Condition 17 – Ground Vibration Levels.

Condition 6 Operating Hours

Ministerial Statement 872 deletes Condition 6 of Ministerial Statement 706, and replaces it with the following;

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.

The proponent has requested the deletion of Condition 6 in order to allow greater flexibility in operating hours, particularly to allow for the operation of the tertiary crushers and associated equipment beyond the current restrictions. The proponent proposes that noise emissions are instead managed under Condition 16 of Ministerial Statement 706 and the provisions of Part V of the EP Act.

The proponent has conducted noise assessments and measurements during the currently permitted operating hours, and modelled the potential noise emissions of the proposed extended operations. The modelling indicates the proposed extended operations and equipment would be able to comply with the Noise Regulations.

The EPA considers the proponent has undertaken sufficient investigations to facilitate the satisfactory management of noise emissions from the Voyager II quarry. The EPA notes that the proponent will be required to comply with the Noise Regulations, and to implement the Operational Noise Measurement Programme required by Condition 16 of Ministerial Statement 706.

The EPA recommends the deletion of Condition 6.

Condition 11 Ambient Dust Standard and Condition 12 Dust Monitoring and Remedial Action

Condition 11 of Ministerial Statement 706 states:

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.

The proponent considers this condition overly restrictive as it goes beyond the National Environment Protection (Ambient Air Quality) Measure (NEPM) by using the ambient air quality standard as a limit, rather than a goal or target. The proponent has requested Condition 11 be deleted, and dust emissions instead managed under an amended Condition 12 and the provisions of Part V of the EP Act.

Condition 12 of Ministerial Statement 706 requires the preparation and implementation of a Dust Monitoring and Remedial Action Programme to ensure dust associated with all operations, which emanates from and leaves the (proposal) site, complies with the standard prescribed in Condition 11. The proponent has requested this condition is amended to remove references to the standard prescribed in Condition 11.

The NEPM gives the ambient air quality standard for PM₁₀ as 50 µg/m³ averaged over a 24 hour period, with a goal maximum exceedance of this standard of five days a year. The EPA does not consider it appropriate for an implementation condition to prescribe the NEPM standard as a limit, particularly as Condition 11 requires measurements to be taken at the boundary of the proposal property, some distance from the nearest sensitive receptor.

The EPA considers the amended Condition 12, which retains the requirement for a Dust Monitoring and Remedial Action Programme, and the provisions of Part V of the EP Act are sufficient to manage the potential impacts of dust emissions from the Voyager II quarry.

The EPA recommends that Condition 11 is deleted, and Condition 12 is amended as detailed in the attached recommended statement.

Condition 17 Ground Vibration Levels

Condition 17 states:

The proponent shall measure for each blast, the peak particle velocity (in millimetres per second) in the ground at a measurement point on two or more "Sensitive Sites" to the requirements of the Minister for Environment.

A "Sensitive Site" is defined as including any land within 10 metres of a residence, hospital, school or other premises in which people could reasonably be expected to be free from undue annoyance and nuisance caused by blasting.

The proponent has requested this condition be deleted, as it requires measurements to be taken on private property to which the proponent has no right of access, and it may therefore be beyond the power of the proponent to comply with the condition.

Condition 18 of Ministerial Statement 706 requires the proponent to prepare and implement a Blast and Vibration Management Plan to manage blasting activities to prevent unacceptable impacts on the amenity of nearby residents. Blasting must also comply with regulations made under the *Mines Safety and Inspection Act 1994*, and airblast levels due to blasting must comply with the Noise Regulations. Vibration levels may also be regulated through licences issued under Part V of the EP Act.

The EPA considers Condition 18 of Ministerial Statement 706, the provisions of the *Mines Safety and Inspection Act 1994* and Part V of the EP Act, are sufficient to manage the potential impacts of blasting at the Voyager II quarry.

The EPA recommends the deletion of Condition 17.

EPA Conclusion(s) and Recommendation(s)

The EPA concludes that in relation to Ministerial Statement 706 it is appropriate to delete conditions 6, 11 and 17, and to amend Condition 12 as detailed in the attached recommended Statement.

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment:

1. That it is appropriate to delete Condition 6 of Statement 706, as amended by Statement 872, to remove restrictions on the operating hours of the proposal;
2. That it is appropriate to delete Condition 11 of Statement 706 to remove the requirements to meet an ambient air quality limit at the property boundary;
3. That it is appropriate to amend Condition 12 of Statement 706 to remove references to the ambient air quality limit specified in Condition 11;
4. That it is appropriate to delete Condition 17 of Statement 706 to remove the requirement to measure ground vibration levels at two or more "Sensitive Sites"; and
5. That, after complying with section 46(8) of the *Environmental Protection Act 1986*, the Minister issues a statement of decision to change conditions 6, 11, 12 and 17 in the manner provided for in the attached recommended statement.

RECOMMENDED ENVIRONMENTAL CONDITIONS

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

VOYAGER QUARRY, LOTS 11 AND 14 HORTON ROAD, THE LAKES,
AVON LOCATION 1881, SHIRE OF NORTHAM

Proposal: The development and operation of a quarry incorporating excavation of approximately 60 million tonnes of hard rock, approximately 2 million tonnes of gravel and approximately 12 million tonnes of clay from the quarry footprint. The total area of disturbance will be up to 85 hectares, as documented in Schedule 1 of Statement 706.

Proponent: BGC (Australia) Pty Ltd

Proponent Address: Lot 4 Stirling Crescent, HAZELMERE WA 6005

Assessment Number: 1931

Previous Assessment Numbers:

Report of the Environmental Protection Authority: 1466

Previous Reports of the Environmental Protection Authority: 1169, 1406

Previous Ministerial Statement Numbers: 706, 872

The implementation of the proposal to which the above report of the Environmental Protection Authority relates is subject to the conditions and procedures contained in Ministerial Statement No. 706, as amended by the following:

1. **Condition 6 of Statement 706 is deleted.**
2. **Condition 11 of Statement 706 is deleted.**

3. Condition 12 of Statement 706 is deleted, and replaced with:

12-1 Within six months of the date of this statement, the proponent shall prepare a Dust Monitoring and Remedial Action Programme, to the requirements of the CEO*.

The objective of this Programme is to minimise and manage dust emissions emanating from and leaving the proposal site associated with all operations including land clearing, excavation, blasting, stockpiles and general operational activities such as screening, crushing and transport.

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 revise the Dust Monitoring and Remedial Action Programme required by Condition 12-1 as required by, or with the approval of, the CEO*.

12-4 The proponent shall make the Dust Monitoring and Remedial Action Programme required by Condition 12-1 publicly available in a manner approved by the CEO*.

4. Condition 17 of Statement 706 is deleted.

5. General Amendments

This Statement supersedes Statement 872.

**HON BILL MARMION MLA
MINISTER FOR ENVIRONMENT; WATER**

* The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the *Environmental Protection Act 1986*, or his delegate.

Notes

The following notes are provided for information and do not form a part of the implementation conditions of the Statement:

- The proponent for the time being nominated by the Minister for Environment under section 38(6) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal unless and until that nomination has been revoked and another person is nominated.
- If the person nominated by the Minister, ceases to have responsibility for the proposal, that person is required to provide written notice to the Environmental Protection Authority of its intention to relinquish responsibility for the proposal and the name of the person to whom responsibility for the proposal will pass or has passed. The Minister for Environment may revoke a nomination made under section 38(6) of the *Environmental Protection Act 1986* and nominate another person.
- To initiate a change of proponent, the nominated proponent and proposed proponent are required to complete and submit *Post Assessment Form 1 – Application to Change Nominated Proponent*.
- The General Manager of the Office of the Environmental Protection Authority was the Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the *Environmental Protection Act 1986* at the time the Statement was signed by the Minister for Environment.