



# **Asbestos Management Plan**

**Hanson Construction Materials Pty Ltd**

**East Guyong Quarry, East Guyong NSW**

**May 2012**

**Our Ref SH0137:89873**

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## **Hanson Construction Materials Pty Ltd**

### **East Guyong Quarry, East Guyong NSW**

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## Statement of Limitations - General

This report has been prepared in accordance with the agreement between Hanson Construction Materials Pty Ltd and Noel Arnold & Associates Pty Ltd.

Within the limitations of the agreed upon scope of services, this assessment has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report is solely for the use of Hanson Construction Materials Pty Ltd and any reliance of this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments are provided by Noel Arnold & Associates Pty Ltd.

## Document Quality Management

Document Quality Management Details	
<b>Report Name:</b>	Naturally Occurring Asbestos Management Plan
<b>Site Details:</b>	East Guyong Quarry, East Guyong NSW
<b>Project Number:</b>	89832-Rev 2 89873-Rev1
<b>Client Name:</b>	Hanson Construction Materials Pty Ltd
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Revision	Date Prepared	Prepared by	Date Reviewed	Reviewed By	Summary of Revision
-	30/5/2011	SB	16/8/2011	BD	Draft Report
1	25/8/2011	SB	26/8/2011	BD	Revised Draft (changes reflecting Department of Planning & Infrastructure comments and also inclusion of findings from further investigation reports)
2	30/8/2011	SB	30/8/2011	BD	Further Revised Draft (changes reflecting further reports and comments)
3	14/9/2011		14/9/2011		Further Revised Draft
4	21/10/2011		21/10/2011		Final Draft
5	2/4/2012		2/4/2012		Revised Final Draft
6	10/5/2012		10/5/2012		Further Revised Final Draft

## 1. Introduction

### 1.1 Project Approval

- 1.1.1 On 6 January 2011, the (then) NSW Department of Planning approved Major Project Application 06\_0193 for the development of the East Guyong Quarry, East Guyong NSW (the **Project**), subject to conditions.
- 1.1.2 The conditions are set out in Schedules 1 to 5 of the Project Approval. Schedule 3, entitled "Environmental Performance Conditions", includes conditions specific to the management of the naturally-occurring asbestos (**NOA**) that has been identified at the Site.
- 1.1.3 This Asbestos Management Plan has been prepared in fulfilment of Item 4 of Schedule 3 of the Project Approval, which provides that the Project Proponent, Hanson Construction Materials Pty Ltd (**Hanson**), must prepare and implement an Asbestos Management Plan for the Project in consultation with the Executive Director, Mineral Resources, Division of Resources and Energy, within the Department of Trade and Investment, Regional Infrastructure and Services (**DRE**) and to the satisfaction of the Director-General of the NSW Department of Planning and Infrastructure (**Director-General**).
- 1.1.4 In particular, Item 4 of Schedule 3 provides that the Asbestos Management Plan must:
- (a) be prepared by a suitably qualified consultancy with expertise in the area of asbestos risk management, and be submitted to the Director-General for approval prior to the commencement of any earthworks at the Site;
  - (b) include:
    - \* a description of the measures and controls that would be implemented to manage asbestos within the Project area;
    - \* an asbestos monitoring protocol for evaluating compliance with the asbestos impact assessment criterion, with the following timeframe for measurement of asbestos:
      - (i) daily testing during the construction of all site infrastructure (excepting the quarry pit);
      - (ii) weekly testing following construction of site infrastructure for a period of three months;
      - (iii) monthly testing for the following 12 months; and
      - (iv) to the satisfaction of the Director-General thereafter;
    - \* a protocol for the notification of monitoring results;
    - \* a protocol for the investigation, notification and mitigation of identified exceedances of the assessment criterion; and
    - \* incident protocols in the event of exposure to asbestos.
- 1.1.5 In addition, this Asbestos Management Plan addresses other asbestos-related conditions in the Project Approval, which provide, in summary:
- Item 1, Schedule 3:** The Proponent shall undertake further investigations to map the extent of the asbestos mineralisation within the Project area to the satisfaction of the Director-General.
- Item 2, Schedule 3:** The Proponent must install appropriate fencing and warning signage around all surface outcrops of asbestos minerals within the Project Area to the satisfaction of the Director-General.
- Item 3, Schedule 3:** The Proponent shall ensure that any asbestos fibres generated at the Site do not exceed the impact assessment criterion of 0.01 asbestos fibres/ml of air.

## 1.2 Asbestos Management Plan

- 1.2.1 The purpose of this Asbestos Management Plan is to ensure that all practicable steps are taken to eliminate the risk of exposure to asbestos for:
- (a) personnel, including visitors of the Site; and
  - (b) the public, including residents of neighbouring properties.
- 1.2.2 To accomplish this, the Asbestos Management Plan specifies work practices and procedures to:
- (a) ensure appropriate implementation of risk control strategies;
  - (b) ensure that works do not disturb Byng Volcanics bedrock, particularly that underlying the proposed quarry area (the **Quarry Area**) and the proposed infrastructure area (the **IA**) which may or may not host NOA;
  - (c) avoid encountering and disturbing NOA otherwise located on the Site;
  - (d) ensure that the asbestos fibre levels generated at the Site do not exceed the Asbestos Impact Assessment Criterion of 0.01 fibres/ml;
  - (e) prevent or minimise the possibility of accidental disturbance of Byng Volcanics; and
  - (f) monitor and review the risk control strategies.
- 1.2.3 This Asbestos Management Plan must be made available to, and understood by, all participants involved in the construction, management and operation of the Project.
- 1.2.4 The appropriate personnel at the site should be aware of the presence of the NOA materials and the need to ensure they are not disturbed. They should also understand their role in achieving this.

## 1.3 Definitions and Abbreviations

- 1.3.1 "Access Road" means the 3.4 hectares of the Site proposed to be used as access roads.
- 1.3.2 "AHD" means the Australian Height Datum.
- 1.3.3 "Asbestos Impact Assessment Criterion" (**AIAC**) means 0.01 airborne asbestos fibres/ml.
- 1.3.4 "Auger Report" means Rangott Mineral Exploration Pty Ltd, Report on the Auger Drilling to Delineate the Distribution of Naturally Occurring Asbestos at the Planned Lyndon Quarry Site (East Guyong, NSW) dated 4<sup>th</sup> May 2011.
- 1.3.5 "Authorised Geologist" means a person with qualifications in geology who has been authorised by the Director-General as required by Section 1.5.
- 1.3.6 "Authorised Blasting Officer" means a person with qualifications in blasting practices who has been authorised by the Director-General as required by Section 1.6.
- 1.3.7 "Byng Volcanics" (**BV**) means the Ordovician aged bedrock which underlies a substantial part of the East Guyong District and which may or may not host NOA, and includes any weathered or regolith BV which has the potential to host NOA.
- 1.3.8 "Conditions of Approval" means Schedules 2 to 5 of the Project Approval for Application 06\_0193 granted by the Minister for Planning on 6 January 2011.
- 1.3.9 "Director-General" means the Director-General of the NSW Department of Planning and Infrastructure.
- 1.3.10 "DRE" means Division of Resources and Energy, within the Department of Trade and Investment, Regional Infrastructure and Services.
- 1.3.11 "EAR" means the Environmental Assessment Report, Hard Rock Quarry, East Guyong NSW dated 18 September 2009.
- 1.3.12 "GDA94" means Geocentric Datum of Australia 1994.

- 1.3.13 "Hanson" means Hanson Construction Materials Pty Ltd.
- 1.3.14 "Hanson Quarry Manager" means a person who has been authorised by Hanson as required by Section 1.7.
- 1.3.15 "Hanson Project Manager" means a person who has been authorised by Hanson as required by Section 1.8.
- 1.3.16 "IA" means the proposed infrastructure area.
- 1.3.17 "Intrusive Works" means any works for Site infrastructure that have the potential to disturb soil or rock on the IA.
- 1.3.18 "NATA" means the National Association of Testing Authorities Australia.
- 1.3.19 "NOA" means naturally-occurring asbestos.
- 1.3.20 "NOA Report" means Rangott Mineral Exploration Pty Ltd, Report on the Occurrence and Distribution of Asbestos Minerals at the Planned Quarry Site, January 2010.
- 1.3.21 "PCM" means phase contrast microscopy.
- 1.3.22 "Percussion Drilling Report" means Rangott Mineral Exploration Pty Ltd, Report on RC percussion Drilling of Pit Shell Margins at the Planned Lyndon Quarry Site (East Guyong, NSW) and Associated Activities dated 19<sup>th</sup> August 2011.
- 1.3.23 "PLM" means polarised light microscopy.
- 1.3.24 "PPE" means personal protective equipment.
- 1.3.25 "Project" means Major Project Application 06\_0193 for the development of the East Guyong Quarry, East Guyong NSW.
- 1.3.26 "Quantification Limit" means 0.01 airborne fibres/ml.
- 1.3.27 "Quarry Area" means the proposed quarry area.
- 1.3.28 "Quarry Pit Development Plan" (**QPDP**) means the plan regarding how the quarry extraction is to progress over time.
- 1.3.29 "SEM" means scanning electron microscopy.
- 1.3.30 "Site" means Lots 110 and 111 of DP 852503 and Lots 3, 4 and 5 of DP 854608, Lewis Ponds Creek, Shire of Cabonne, Guyong.
- 1.3.31 "TEM" means transmission electron microscopy.

#### **1.4 Composition of Asbestos Management Plan**

- 1.4.1 This Asbestos Management Plan comprises the following chapters:

**Chapter 1:** Introduction.

**Chapter 2:** Description of the Site.

**Chapter 3:** Description of the known occurrence and distribution of NOA on the Site.

**Chapter 4:** Control Measures specific to the Quarry Area.

**Chapter 5:** Control Measures specific to the Infrastructure Area.

**Chapter 6:** Asbestos Fibre Air Monitoring Protocol.

**Chapter 7:** Asbestos Fibre Air Monitoring Notification Protocol.

**Chapter 8:** Asbestos Fibre Exceedance Protocol.

**Chapter 9:** Incident Protocol in the event of exposure to NOA.

**Chapter 10:** Key responsibilities of relevant parties.

**Chapter 11:** Further inquiries.

**Appendix A:** Asbestos awareness training.

**Appendix B:** Asbestos clean up or removal works.

**Appendix C:** Asbestos fibre air monitoring locations.

**1.5 Appointment of Authorised Geologist**

- 1.5.1 Before any Intrusive Works or quarrying works are carried out on the Project, and at all times thereafter until the conclusion of the Project, Hanson must ensure that there is one or more Authorised Geologists appointed in accordance with this provision.
- 1.5.2 Hanson may nominate to the Department a person with qualifications in geology for approval as an Authorised Geologist and provide the Department with information relating to the person's qualifications and experience. The Department may authorise any person so nominated to act as an Authorised Geologist for the purposes of this Asbestos Management Plan.

**1.6 Appointment of Authorised Blasting Officer**

- 1.6.1 Before any preparation for quarrying work is carried out on the Project, and at all times thereafter until the conclusion of the Project, Hanson must ensure that there is one or more Authorised Blasting Officers appointed in accordance with this provision.
- 1.6.2 Hanson may nominate to the Department a person with qualifications in blasting practices for approval as an Authorised Blasting Officer and provide the Department with information relating to the person's qualifications and experience. The Department may authorise any person so nominated to act as an Authorised Blasting Officer for the purposes of this Asbestos Management Plan.

**1.7 Appointment of Hanson Quarry Manager**

- 1.7.1 Before any preparation for quarrying work is carried out on the Project, and at all times thereafter until the conclusion of the Project, Hanson must ensure that there is an authorised Hanson Quarry Manager.
- 1.7.2 The Hanson Quarry Manager must, upon being appointed, read this Asbestos Management Plan and be made aware of his or her responsibilities under it.

**1.8 Appointment of Hanson Project Manager**

- 1.8.1 Before any Intrusive Works are carried out on the Project, and at all times thereafter until the conclusion of Intrusive Works, Hanson must ensure that there is an authorised Hanson Project Manager.
- 1.8.2 The Hanson Project Manager must, upon being appointed, read this Asbestos Management Plan and be made aware of his or her responsibilities under it.

## 2. Project Site

- 2.1 The Project comprises the establishment of a hard rock quarry, together with associated infrastructure and an access road, on Lots 110 and 111 of DP 852503 and Lots 3, 4 and 5 of DP 854608, Lewis Ponds Creek, Shire of Cabonne, Guyong (the **Site**).
- 2.2 The Site is located in a rural area approximately 32 kilometres west of Bathurst and 20 kilometres southeast of Orange. The Site is located adjacent to the Mitchell Highway.
- 2.3 The Quarry Area will be located on a ridge on the north-west part of the Site. The IA will be located in a sloping area in the northern section of the Site.
- 2.4 The Site has a total area of 147 hectares. The Quarry Area will occupy 15 hectares, the IA will occupy 7.3 hectares and the access road (the **Access Road**) will occupy 3.4 hectares.
- 2.5 The quarry will be operating to extract approximately 15 million tonnes of basalt over a 30 year period.
- 2.6 A Site layout of the Project is at **Figure 1**.



Figure 1 – Site Layout of the Project

