

ENVIRONMENTAL AUDIT OF UNIMIN LIME (VICTORIA) PTY LTD

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INTRODUCTION

EPA Victoria has recently completed an environmental audit of the limestone quarry and lime and stone processing premises operated by Unimin Lime (Victoria) Pty Ltd (Unimin) in Cave Hill Road, Lilydale. The audit examined the impact on the environment from Unimin's activities and, in particular, focused on discharges to water, as well as dust and other emissions to the atmosphere from the site.

The audit also assessed Unimin's compliance with its EPA licence and with policies administered by EPA.

BACKGROUND

Under the *Environment Protection Act 1970*, certain types of premises which pose a risk to the environment are required to hold a waste discharge licence in order to operate.

Unimin holds an EPA licence for its Lilydale operations. The licence has historically focused on emissions from the lime processing facility and discharges to Olinda Creek from dewatering of the quarry.

EPA was concerned about possible dust emissions from the site and commissioned the audit as a means of obtaining a more comprehensive view of the environmental impacts of Unimin's operations

and, where necessary, recommendations to improve Unimin's environmental performance.

FINDINGS OF THE AUDIT

EPA found a significant number of areas in which Unimin either did not meet its statutory obligations or was unable to demonstrate, to the satisfaction of the auditor, that the requirements were met. The issues identified ranged from failure to submit reports through to discharge of particles and other emissions to the atmosphere in excess of licence limits and failure to minimise sediment run-off to Olinda Creek.

The audit identified that the priorities for further work at the premises were associated with the emission of very fine dust particles to the atmosphere and the discharge of contaminated water to Olinda Creek.

Stockpiles and haul roads are the most significant contributors to dust extending beyond the premises boundary. The dust from the premises consists of a range of naturally occurring substances that may include respirable crystalline silica. Like other fine particles, this has been linked to potential adverse health effects in humans, such as chronic respiratory illness.

In the absence of monitoring data, EPA conducted air quality modelling to assess whether the dust

from Unimin was likely to be impacting upon the surrounding environment.

The results of the modelling suggested possible impact on the community. The next step is to obtain better information on the impact of dust on the community. EPA has amended Unimin's licence to require this monitoring to be undertaken.

The discharge of groundwater from the quarry and stormwater run-off from the stockpiles have the potential to impact on Olinda Creek, particularly over the drier months.

Discharges of highly turbid stormwater from the premises during the wetter months also have the potential to impact on Olinda Creek. Sediment controls installed on site were found to be limited and ineffective. Stormwater discharges from the premises have not been monitored; EPA will require an assessment of stormwater quality.

WHAT IS BEING DONE

EPA has amended Unimin's licence to require an investigation into air and water discharges from its premises. EPA has required that the scientific reports resulting from these studies be prepared by an independent expert.

Unimin has submitted a proposal to monitor the impact of dust from the premises on surrounding residents for EPA approval. The sampling and analysis of overburden and other material that may be a source of dust from the site has already commenced. An ambient air monitoring program will commence by the middle of the year and is expected to continue for a period of up to two years.

The stream monitoring program is scheduled to start in February 2007, following the implementation of improved sediment controls. The program will continue for a period of up to two years.

The licence has also been amended to require Unimin to submit a revised environmental improvement plan (EIP). An EIP is an action plan prepared and committed to by a company to address its environmental issues.

Unimin has embarked upon a community consultation program to inform and seek feedback from the community in relation to proposed works that have the potential to impact on the local environment.

The company is also developing an integrated environmental management system (EMS) for the site. The EIP and EMS will allow Unimin to better monitor the progress of environmental improvements and to demonstrate compliance with legislative requirements to the local community and government.

EPA will work with Unimin, the community, local government and the Department of Primary Industries to ensure Unimin implements the recommendations of the audit report within agreed time lines.

EPA encourages members of the public to participate in the community briefing sessions held at Unimin on a bi-monthly basis, and contribute to the development of the EIP.

For further information:

Call EPA Victoria on 9695 2722.

Or access EPA's website at www.epa.vic.gov.au.