

LEGISLATIVE COUNCIL
Question on notice

- 2 MAY 2012

Tuesday, 6 March 2012

5156. Hon Robin Chapple to the Minister for Mental Health representing the Minister for Environment.

With reference to four questions asked by Hon Derrick Tomlinson: 2004-03-02 number 11, 2004-03-30 number 1736, 2004-05-04 number 249, 2004-05-06 number 286, Supplementary Information No. B5 provided in the other place on Thursday, 3 June 2010 in respect of Division 67, Environment and Conservation and photos taken in 2011 at [http://www.robinchapple.com/qdata 'Lumen Christi Science leaf photos.pdf'](http://www.robinchapple.com/qdata/LumenChristiScienceleafphotos.pdf), I ask -

- (1) Since the questions were asked in 2004 has the quarry expanded?
- (2) If yes to (1), by how much in terms of area and production tonnages?
- (3) Has the boundary of the operating quarry moved closer to the Lumen Christi Catholic College since 2004?
- (4) If yes to (3), what is the current distance between the operating quarry and the Lumen Christi Catholic College?
- (5) What was the distance between the operating quarry and the Lumen Christi Catholic College in 2004?
- (6) Can the Minister advise whether the Department of Environmental Protection or the Environmental Protection Authority has formed opinions that dust from the CSR Ltd quarry in Gosnells represents environmental nuisances, environmental hazards or health hazards to residents in adjoining land?
- (7) How many times in 2004, 2005, 2006, 2007, 2008, 2009, 2010 and 2011 did the quarry breach a national environmental protection measure (NEPM) for fine dust?
- (8) Who are the current owners and operators of the quarry?
- (9) When was the local air quality monitoring program initiated?
- (10) How many monitors are there and what are their locations?
- (11) Why is the Gosnells monitoring station not operational for the entire year?
- (12) What percentage of the time does the Gosnells monitoring station operate?
- (13) On what dates did the Gosnells monitoring station not operate over the last five years?
- (14) The 2002 report titled 'Buffer and Odour Assessment - Proposed West Martin Residential Project' commissioned by the City of Gosnells from environmental consultants Sinclair Knight Merz, identified a number of potential breaches. Are these breaches still occurring?

(15) The above report indicated that a portion of Lumen Christi College and some residents are in a zone which could expect four to six exceedences of the PM10 (10 m) standard per year from quarry activities. Are these expectations still current?

(16) Is the Lumen Christi College and some residential housing in a zone which could expect exceedences of the PM2.5 (particles less than 2.5m in diameter) standard per year from quarry activities?

(17) If yes to (16), how many exceedences are recorded or could be expected to occur?

(18) Does a notional buffer zone or buffer zone exist for the quarry and when was it introduced?

(19) If yes to (18), what is the distance of the buffer zone from the edge of the quarry workings and will the Minister table a map of any buffer area?

(20) How far outside the buffer zone is the Lumen Christi College?

(21) If the Lumen Christi College is not outside the buffer zone, what is being done to mitigate the impact of fugitive respiratable particulates?

(22) Are the Lumen Christi College students and staff continually advised that dust from the quarry has potential health risks?

(23) If no to (22), why not?

(24) If yes to (22), is this information made available to the students, parents and staff?

(25) If no to (24), why not?

(26) Has the Minister's department staff visited the Lumen Christi College in respect of the impacts of wind blow dust?

(27) If yes to (26), when was the last visit and what was the purpose of that visit?

(28) Has the department been advised of the significant dust impact at the Lumen Christi Catholic College as a result of fugitive emissions from the adjacent quarry (see photos at [www.robinchapple.com/qdata 'Lumen Christi science leaf photos'](http://www.robinchapple.com/qdata/Lumen_Christi_science_leaf_photos/))?

(29) If no to (28), will the department investigate the impacts of nuisance dust and respiratable particulates at the Lumen Christi Catholic College?

Answer

- (1) The quarry operation is managed under an Extractive Industries Licence administered by the local government. The Department of Environment and Conservation (DEC) cannot make any comment on the expansion of the quarry. Holcim (Australia) Pty Ltd undertakes crushing, screening and stockpiling

activities at the same premises. These activities are licensed by DEC. DEC has advised that the annual throughput for the licensed activities has not changed since 2004.

- (2) Not applicable
- (3) No. DEC has viewed aerial photographs from 2005 and 2011 and it appears that the western boundary has not changed in that time.
- (4) Not applicable
- (5) Based on aerial photographs from 2005 and 2011, the distance between the operating quarry and Lumen Christi College is approximately 1050 metres.
- (6) DEC and the Office of the Environmental Protection Authority have not formed opinions relating to any dust from the quarry.
- (7) There was no dust (PM₁₀) monitoring carried out by the then Department of Environment between 2004 and 2006, nor by DEC until November 2007. DEC conducted PM₁₀ monitoring at the Lumen Christi College between 22 November 2007 and 18 September 2009. There were seven exceedences of the National Environment Protection (Ambient Air Quality) Measure (NEPM) standard for PM₁₀ (50 micrograms per cubic metre average over a 24 hour period) recorded in 2008 and one exceedence during the first eight months of 2009. There were no exceedences during the short monitoring period of 2007. The NEPM allows exceedences of the PM₁₀ ambient air quality standard five days per year, to allow for circumstances such as extremely strong winds, bushfires and high pollen counts.

Holcim has been monitoring PM₁₀ since August 2007, on a dust monitor that is designed to monitor PM₁₀ for dust management purposes only, not for monitoring compliance with the NEPM. The monitoring results suggest no exceedence of the NEPM standard in 2007, six in 2008, three in 2009, none in 2010, one in 2011 and none in 2012.

- (8) Holcim (Australia) Pty Ltd.
- (9) There is no local air quality monitoring program. On 15 August 2007, Holcim implemented a dust monitoring program based on real-time PM₁₀ monitoring at the western boundary of the premises. This monitoring program is ongoing. It is not a requirement of the licence issued by DEC, however, it is a requirement of the City of Gosnells Extractive Industries Licence. Monitoring conducted by DEC is described in the answer to (7).
- (10) There is currently one dust monitor in operation, located at the western boundary of the premises near Lumen Christi College.
- (11)-(12) Holcim's dust monitoring station is operational for the whole year. The monitor is taken off-line only in the case of a malfunction, power failure or for maintenance.
- (13) According to information received from Holcim, the dust monitor was not in operation on the following dates:

29 February - 4 March 2008
2 - 3 June 2008
8 June 2008
16 - 30 June 2008
18 - 19 July 2008
23 - 26 July 2008
28 July - 2 August 2008
8 - 24 December 2008
12 - 13 March 2009
3 - 6 May 2009
29 May - 2 June 2009
6 - 8 June 2009
13 - 14 July 09
22 - 24 July 2009
30 - 31 July 2009
17 August 2009
19 August - 6 October 2009
15 October 2009
17 - 22 October 2009
24 - 25 October 2009
27 - 28 October 2009
31 October 2009
3 - 4 November 2009
8 November 2009
21 - 25 November 2009
30 November - 1 December 2009
1 - 8 February 2010
25 March 2010
13 - 14 May 2010
12 - 16 June 2010
27 June - 3 July 2010
31 July - 5 September 2010
13 - 15 September 2010
29 January - 2 February 2011
11 - 22 February 2011
20 March 2011
4 April 2011
7 - 13 July 2011

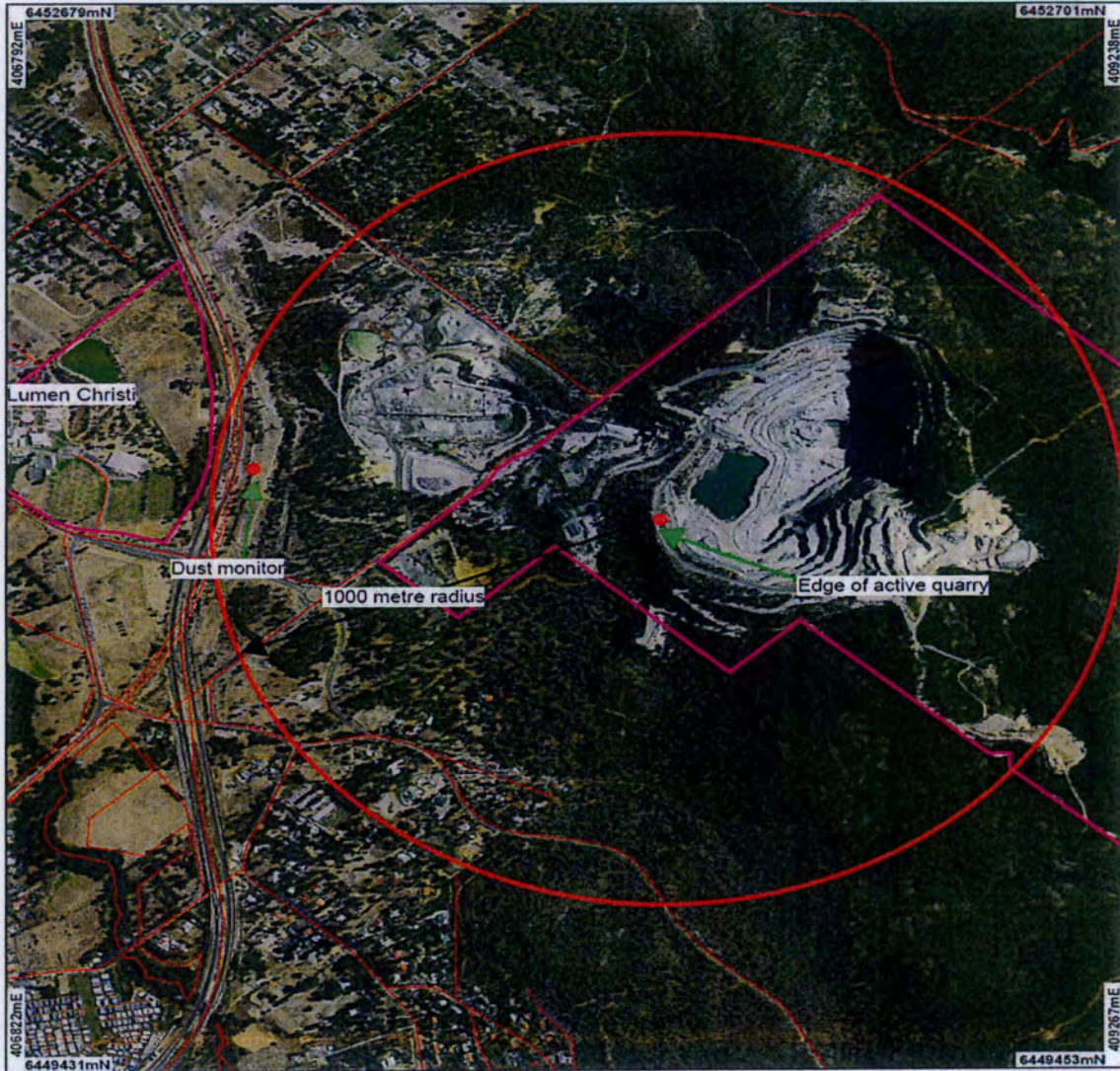
It should be noted that there were other dates where flow/data errors were recorded for short periods during the day.

- (14) The Sinclair Knight Merz 2002 report is a modelling report supplemented with limited monitoring (one month) and was used as a planning tool. The modeling is not a record of compliance. Consequently, the report cannot determine actual breaches.





- (15) No. Due to changes in management practices at the quarry since the modelling report was released, DEC expects no visible dust to cross the premises boundary, and therefore no exceedence of the NEPM standard from quarry operations. From time to time, dust from other sources in the area may affect Lumen Christi College.
- (16) This is unlikely as the majority of particle emissions from quarry operations are typically coarse particles containing the larger size fraction with a low proportion of PM_{2.5} particles.
- (17) Not applicable
- (18) This question should be referred to the Minister for Planning. Nevertheless, in June 2005 the Environmental Protection Authority (EPA) published guidance for the assessment of environmental factors '*Separation Distances between Industrial and Sensitive Land Uses, No 3*'. This guideline is taken into consideration with other information, including modelling, when assessing buffer distances in planning decisions.
- (19) The EPA guidance statement No. 3 recommends 1000 metres. The buffer can be reduced if the premises can demonstrate effective management of emissions. [see tabled paper no] showing the buffer areas recommended in the guidance statement.
- (20) This question should be referred to the Minister for Planning. Lumen Christi College is approximately 50 metres outside the EPA's recommended separation distance for the quarry operation.
- (21) Not applicable
- (22) This question should be referred to the Minister for Health.
- (23)-(25) Not applicable
- (26) Yes
- (27) A briefing on the findings of the particle study conducted by Environmental Resources Management consultants in 2005 to 2006 was held on 21 November 2006 with the Principal of Lumen Christi College and the then local West Martin Residents Group.
- The last contact was made in September 2009 advising the Principal and the groundskeeper of the decommissioning of DEC's particle monitor, which was used to monitor particles between November 2007 and September 2009.
- (28) No
- (29) Yes, DEC will contact Lumen Christi College to investigate the impacts of dust emissions from the quarry.



Map 1: Proximity of Lumen Christi College in relation to the edge of the active quarry
Holcim Gosnells Hardrock Quarry




LEGEND

-  Local Government Authorities
-  Road Centrelines
-  Swan River Trust Act, Swan River Trust Management Area
-  Perth Metropolitan Central 15cm Orthomosaic - Landgate 2011



Scale 1:15014
(Approximate when reproduced at Letter)
Geocentric Datum Australia 1994
Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.
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Prepared for:
Date: 26/03/2012 12:59:38 PM

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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* Project Data. This data has not been quality assured. Please contact map author for details.

Map 2: 1000 meter buffer around the entire Holcim premises

