

Brett Glosko  
Compliance Delivery Manager  
Department of Environment and Heritage Protection  
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Robina Qld 4226  
By email: [goldcoast.es@ehp.qld.gov.au](mailto:goldcoast.es@ehp.qld.gov.au)

September 28, 2016

Dear Brett

**Ambient Air Quality Monitoring Program, Update on Dust Measures and Additional information - Beenleigh Quarry - EPPR00575213**

Holcim (Australia) Pty Ltd notes Department of Environment and Heritage Protection (EHP) letter of 11 August 2016 and the Department's request to develop and implement a particulate monitoring program for the purposes of checking compliance with condition B2 of the site's Environmental Authority (EPPR00575213), in accordance with condition H17. Holcim has engaged Groundwork Plus and MWA Environmental to develop, oversee and implement the required Particulate Monitoring Program, this is provided as **Attachment A**.

As previously noted, Holcim has commenced a number of actions agreed to with EHP. The status of the measures are as follows. This is also available on the Holcim Beenleigh Community Website via the following link:

<http://www.holcim.com.au/about-us/community-link/beenleigh/news/beenleigh-quarry-working-towards-further-dust-improvements.html>

- Reduce speed limit on quarry entrance road to 20kph (Completed)
- Increase use of street sweeper (Completed)
- Increase water cart use on main entrance road (Completed)
- Hose down outside of crushing plant shed (Completed)
- Installation of CoolFog™ on mobile crushing equipment (Completed)
- Implement automatic notifications from on site weather station (Completed)
- Install cameras for real time monitoring of dust emissions over quarry plant and stockpiles (Completed)
- Review of impact monitoring by an air quality expert to gain a better understanding of the impacts and track improvements. (Underway)
- Review long term wheel washing system options as part of air quality expert review. (Underway)
- Review of dust generating activities and management procedures by an air quality expert to provide recommendations on additional measures for dust control. (Underway)
- Review the location of dust deposition gauges with the view to install an additional monitor closer to or along Vennor Drive to cover additional sensitive receptors. This

will be undertaken by Holcim in conjunction with the review by the air quality expert. (Completed)

- Commence PM10 monitoring (requested by EHP following recent complaints) once sensitive receptor locations are identified and approved. (Underway)
- Communicate review findings to stakeholders. (October)

In addition, please find attached the following requested/additional information and resources:

- Questions & Answers Actinolite - This was previously provided to the Community Consultative Committee and others when requested (**Attachment B**).
- Meeting report from latest Community Consultative Committee (**Attachment C**). This is also available on the Holcim Beenleigh Community Website via the following link: <http://www.holcim.com.au/en/about-us/community-link/beenleigh/our-community/community-consultative-committee.html>
- Dust monitoring summary - This was provided to members at the last Community Consultative Committee meeting. The handout shows the last 12 months of results for community dust deposition monitoring and communicates actions Holcim are taking to further minimise dust impacts (**Attachment D**). This is also available on the Holcim Beenleigh Community Website via the following link: <http://www.holcim.com.au/en/about-us/community-link/beenleigh/environment.html>
- Example of CoolFog™ in operation - Please find attached a photo showing the operation of the CoolFog™ and the site's water cart, illustrating how the fog / water sprays can be mistaken for dust (**Attachment E**). These images are also available on the Holcim Beenleigh Community Website via the following link: <http://www.holcim.com.au/about-us/community-link/beenleigh/news/beenleigh-quarry-working-towards-further-dust-improvements.html>

Holcim look forward to maintaining a collaborative relationship with EHP in regard to the management of the Beenleigh Quarry, and will continue to be proactive in engaging with EHP to support this. If you have any further questions or concerns please do not hesitate to either contact myself directly via my details below or via  on

Yours sincerely,

49 Sch 4

Operations Manager - SEQ  
Holcim (Australia) Pty Ltd  
18 Little Cribb St, Milton, Queensland, Australia, 4064  
Office:  or Email: @lafargeholcim.com

Enc:

Attachment A - Particulate Monitoring Program  
Attachment B - Questions & Answers Actinolite  
Attachment C - Meeting report from latest Community Consultative Committee  
Attachment D - Dust monitoring summary  
Attachment E - Example of Coolfog in operation

Department Principal:

Project Contact:

Date: 26 September 2016  
Ref: 339.670.019

ABN: 13 609 422 791

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Planning and Environment Manager - Queensland  
Holcim (Australia) Pty Ltd  
18 Little Cribb St, Milton  
Queensland, Australia, 4064

Dear

**HOLCIM (AUSTRALIA) PTY LTD BEENLEIGH QUARRY - AIR QUALITY MONITORING**

Groundwork Plus have been engaged by Holcim (Australia) Pty Ltd (Holcim) to assist with matters relating to air quality monitoring and management at Holcim's Beenleigh Quarry.

To address the monitoring requirements and additional dust mitigation measures detailed in the Department of Environment and Heritage Protection (the Department) correspondence dated 11 August 2016 (Reference number: CR7369 / CR73910 / CR74010 / CR73682) Groundwork Plus has engaged MWA Environmental to develop, oversee and implement the required Particulate Monitoring Program, this is provided as **Attachment 1 – Particulate Monitoring Program**.

This Particulate Monitoring Program has been prepared in consultation with Groundwork Plus and Holcim, and addresses the requirements of the Department's letter and the relevant conditions of the Environmental Authority (EPPR00575213).

Should you require any further information with regard to this, please do not hesitate to contact me on telephone 3871 0411 or via email on [ddoolan@groundwork.com.au](mailto:ddoolan@groundwork.com.au).

Yours sincerely,

49 Sch4

Team Leader – Environment and Resources  
Groundwork Plus

Enc:  
Attachment 1 – Particulate Monitoring Program

**Attachment 1**

Particulate Monitoring Program

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DSIT RTI Releases



Ref: L33016/BH/16-135

26 September 2016

Groundwork Plus  
6 Mayneview Street  
Milton QLD 4064

Attention: Mr

Dear

**Re: Summary of Dust Monitoring Response to EHP Request –  
Holcim Beenleigh Quarry**

MWA Environmental has been commissioned to assist in responding to the requirements of correspondence from the Queensland Department of Environment and Heritage Protection (“EHP”) *Monitoring requirements and additional dust mitigation measures – Holcim (Australia) Pty Ltd – Beenleigh Quarry Peachy Road, Luscombe – EPPR00575213 (11 August 2016).*

Specific dust monitoring requested in the 11 August 2016 EHP correspondence is as follows:

In accordance with condition B17 of EPPR00575213, the department requests that for the purposes of checking compliance with condition B2; that Holcim immediately develop and implement a particulate monitoring program. Specifically, you are requested to:

1. Re-locate the dust deposition monitoring equipment to a location that is more appropriate for monitoring the impacts of dust deposition on the sensitive receptors located in Vennor Drive and Kirk Outlook, Ormeau.
2. Establish monitoring equipment (in accordance with condition B2) to measure particulate matter with an aerodynamic diameter of less than 10 micrometre ( $\mu\text{m}$ ) ( $\text{PM}_{10}$ ) suspended in the atmosphere over a 24 hour averaging time in an appropriate location to determine the impacts of dust emissions from the quarry operations on the sensitive receptors located in Vennor Drive and Kirk Outlook, Ormeau.
3. Provide the preliminary results of the monitoring to the department by 12 October 2016, with monthly reporting thereafter.

The responses implemented by Holcim (Australia) Pty Ltd (“Holcim”) to each of the above requests are summarised in following sections.

Max Winders & Associates Pty Ltd tas MWA Environmental  
Level 15, 241 Adelaide St, Brisbane GPO BOX 3137, Brisbane Qld 4001  
P 07 3002 5500 F 07 3002 5588 E [mail@mwaenviro.com.au](mailto:mail@mwaenviro.com.au)

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ABN 94 010 833 084

**RTI page No. 5**

Condition B2 of Environmental Authority EPPR00575213 states the following:

<b>B2</b>	<p>An environmental nuisance caused by dust and/or particulate matter includes a release to any dust sensitive place that exceeds either of the following limits at that place:</p> <ul style="list-style-type: none"> <li>(1) Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991 or any later version of this Australian Standard; or</li> <li>(2) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (<math>\mu\text{m}</math>) (<math>\text{PM}_{10}</math>) suspended in the atmosphere of 150 micrograms per cubic metre over a twenty-four (24) hour averaging time, at a dust sensitive place downwind of the approved place(s), when monitored in accordance with: <ul style="list-style-type: none"> <li>(i) Australian Standard AS 3580.9.6 "Ambient air - Particulate matter - Determination of suspended particulate <math>\text{PM}_{10}</math> high-volume sampler with size-selective inlet - Gravimetric method" or any later version of this Australian Standard; or</li> <li>(ii) any alternative method of monitoring <math>\text{PM}_{10}</math> which may be permitted by the "Air Quality Sampling Manual" as published from time to time by the administering authority.</li> </ul> </li> </ul>
<b>B3</b>	<p>Condition (B2) applies if a complaint is made to the administering authority or the licensee about emissions of dust and/or particulate matter resulting from the environmentally relevant activities.</p>

Conditions H17 to H21 of Environmental Authority EPPR00575213 specify the dust monitoring requirements that apply in the event of a written request from EHP, as follows:

H17	<p><b>Ambient Particulate Monitoring</b> For the purposes of checking compliance with condition B2, the registered operator of this development approval must develop and implement a particulate monitoring program upon receipt of a written request from the administering authority to carry out such monitoring.</p>
H18	<p>The particulate monitoring program must provide for:</p> <ul style="list-style-type: none"> <li>(i) at least quarterly monitoring of ambient particulate matter (insoluble analysis and particulate matter deposition rate in milligrams/square metre/day) at not less than four (4) locations sited at approximately even spacing around the approved place in the proximity of dust sensitive places that are potentially affected by release of dust and particulate matter; and</li> <li>(ii) monitoring of ambient particulate matter (insoluble analysis and particulate matter deposition rate in milligrams/square metre/day) over a period of at least three (3) consecutive thirty (30) day periods at a dust sensitive place, to investigate any complaint alleging dust nuisance that is reasonably likely to have emanated from the approved place; and</li> <li>(iii) monitoring of the twenty-four (24) average concentration of particulate matter with an aerodynamic diameter less than 10 micrometre (<math>\mu\text{m}</math>) (<math>\text{PM}_{10}</math>) suspended in the atmosphere downwind and beyond the boundary of the approved place to investigate any complaint alleging that an environmental nuisance is reasonably likely to have emanated from the approved place. The average concentration must be calculated from a minimum of eight (8) samples obtained over a one (1) month period.</li> </ul>
H19	<p>Samples taken for the particulate monitoring program must be collected and analysed in accordance with the requirements of the <i>Department of Environment "Air Quality Sampling Manual", first edition, November 1997</i>, or more recent editions or supplements to that document as are published by the Department from time to time.</p>
H20	<p>All determinations of particulate monitoring must be performed by a person or body possessing appropriate experience or qualifications to perform the required determinations.</p>
H21	<p>Records must be kept of the results of all monitoring of particulate matter (dust) deposition rates and monitoring of the twenty-four (24) average concentration of particulate matter with an aerodynamic diameter less than 10 micrometre (<math>\mu\text{m}</math>) (<math>\text{PM}_{10}</math>) suspended in the atmosphere.</p>

In the event of a complaint alleging dust nuisance, Condition H18(ii) requires dust deposition monitoring in accordance with AS3580.10.1:2003 be undertaken for a minimum of three (3) consecutive thirty (30) day periods. Similarly, Condition H18(iii) requires  $\text{PM}_{10}$  monitoring to be undertaken by methods supported by Condition H19 for a minimum of eight (8) 24-hour samples over a one (1) month period. Although not specified in the Conditions, it is logical that the monitoring in response to a complaint should be undertaken at location(s) representative location(s) from which the complaint(s) are received. In this instance, the 11 August 2016 EHP correspondence identifies the Vennor Drive and Kirk Outlook, Ormeau residential properties as the relevant locations for dust monitoring.

1. Re-locate the dust deposition monitoring equipment to a location that is more appropriate for monitoring the impacts of dust deposition on the sensitive receptors located in Vennor Drive and Kirk Outlook, Ormeau.

## RESPONSE

Three additional dust deposition monitoring locations have been implemented along Vennor Drive, as follows:

HBDG13V:  Vennor Drive, Ormeau (residential property)

Installed 1 September 2016

Sited at 2.0m height at north corner of property approximately 12m from house on adjoining property and 8m from significant tree dripline

Siting compliant with AS3580.1.1:2007 guidance with exception of 8 metre separation from tree driplines as compared to 10m guidance

HBDG66V:  Vennor Drive, Ormeau (residential property)

Installed 1 September 2016

Sited at 2.0m height at northwestern corner of property approximately 9m from shed and 13m from significant tree dripline

Siting compliant with AS3580.1.1:2007 guidance

HBDG34V:  Vennor Drive, Ormeau (residential property)

Installed 15 September 2016

Sited at approximately 3.3m height above base of retaining wall level and 1.8m above footpath level at western boundary of property approximately 6m from house and 8m from significant tree dripline.

Siting compliant with AS3580.1.1:2007 guidance with exception of 8 metre separation from tree driplines as compared to 10m guidance and elevated height above bottom of retaining wall to provide representative monitoring location



With permission from the landowners Holcim intends to continue monitoring at the HBDG13V, HBDG66V and HBDG34V locations through the routine monitoring program.

The currently operational dust deposition monitoring locations are shown in **Figure 1 – Dust Deposition Monitoring Locations**.



**Figure 1 – Dust Deposition Monitoring Locations**  
(source: Groundwork Plus)

The three new dust deposition monitoring locations, in conjunction with the existing monitoring locations HBDG58V at Vennor Drive and HBDG92P at Peachey Road, are considered to provide appropriate coverage of the Vennor Drive and Kirk Outlook residential land uses nearest to the Holcim Beenleigh Quarry.

It is proposed to continue to monitoring at all other existing dust deposition monitoring locations shown on **Figure 1** for the balance of the September and through the October monitoring period.

Following the October sample period consideration will be given by Holcim to ceasing monitoring at a several existing dust deposition monitoring locations that are in close proximity to quarry operations and are not representative of sensitive receptor locations. If Holcim does continue monitoring at the near-field locations then this will be solely for trend analysis and to provide indicators for quarry management rather than for assessment of potential dust nuisance at sensitive receptors.

MWA Environmental has advised Holcim to synchronise sample timing for all pre-existing and recently established dust deposition monitoring locations on or about 30 September 2016. The synchronisation at this time will allow for:

- Future samples to be directly compared as a result of consistent sample periods;
- Monitoring results to be reported based upon approximate calendar month periods in the future as per s7.4.2 of AS3580.10.1:2003:

*“Deposit gauges should be changed on the first day of each month or as near as possible to the first day of each month”*

It is noted that the synchronisation will result in the following sample periods inconsistent with the 30±2 days specified in AS3580.10.1:2003:

- HBDG34V will be a 15 day sample period for September 2016; and
- All samples from dust deposition monitoring locations implemented prior to September 2016 were placed on 19 August 2016 and will be a 43 day sample period to 30 September 2016.

**2. Establish monitoring equipment (in accordance with condition B2) to measure particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM<sub>10</sub>) suspended in the atmosphere over a 24 hour averaging time in an appropriate location to determine the impacts of dust emissions from the quarry operations on the sensitive receptors located in Vennor Drive and Kirk Outlook, Ormeau.**

## RESPONSE

MWA Environmental has commissioned Assured Monitoring Group (“AMG”) to undertake the following monitoring at <sup>49 S</sup> Vennor Drive, Ormeau for a minimum 1 month period in accordance with Environmental Authority EPPR00575213 Condition H18(iii).

The monitoring location at  Vennor Drive was selected on the following basis:

- Elevated monitoring location with 360 degree exposure and line-of-sight to quarry
- Excellent siting opportunity in terms of clear sky angle and separation from structures

- Analysis of on-site weather station data from the Holcim Beenleigh Quarry for the available October/November period 2015 indicated a high frequency of winds that would direct dust emissions from the crushing plant, stockpile and pit areas towards Vennor Drive during the expected PM<sub>10</sub> monitoring period. A 6am to 6pm (operating hours) wind rose superimposed on the crushing plant on an aerial photograph base is shown on **Figure 2** below.



**Figure 2: 6am to 6pm Wind Rose for Available October/November 2015 On-Site Weather Station Data**

The monitoring is to be undertaken using a PM<sub>10</sub> TEOM as an approved method in the *Air quality sampling manual* (Queensland Environmental Protection Agency, November 1997).

A weather station is to be co-located with the PM<sub>10</sub> TEOM.

The PM<sub>10</sub> TEOM and weather station are expected to be operational by 4 October 2016.

3. Provide the preliminary results of the monitoring to the department by 12 October 2016, with monthly reporting thereafter.

### RESPONSE

Preliminary results will be submitted to EHP by 12 October 2016 and are expected to comprise a minimum 5 days of validated data from the PM<sub>10</sub> TEOM and the 'September' samples for the three new dust deposition monitoring locations on Vennor Drive.

A further monitoring report will be submitted by 12 November 2016 comprising the results of the full (minimum) 1 month PM<sub>10</sub> TEOM monitoring period and the 'October' dust deposition monitoring samples.

Monthly reporting will be submitted thereafter for any additional monitoring undertaken by Holcim in accordance with the Environmental Authority.

I trust the above is suitable for your present requirements and if you require any further information please contact the undersigned.

Yours sincerely

49 Sch4



Environmental Engineer

## Actinolite

Questions and answers

May 2015

### What is actinolite?

Actinolite is a commonly occurring amphibole mineral consisting of the elements calcium, magnesium, iron, silicon, oxygen and hydrogen.

There are different forms of actinolite including non-fibrous and fibrous forms.

### Is actinolite harmful?

Non-fibrous actinolite (technically referred to as acicular actinolite) poses a low risk to human health and is not considered hazardous.

The fibrous type of actinolite is an asbestiform material and once airborne can be hazardous to human health. Fibrous/asbestiform actinolite is one of the regulated forms of asbestos.

The presence of actinolite in hard rock does not necessarily mean it is hazardous.

### Where is actinolite found?

Actinolite is naturally formed in the earth's crust and is found across the world. Its distribution and abundance is related to the type of rock that it is found in.

It is more common and abundant in metamorphic rocks such as greenstones and banded iron formations.

Both non-fibrous and fibrous actinolite are formed by the recrystallisation of clay grains but vary with the level of metamorphism imposed on them.

### What is metamorphism?

Metamorphism is a natural process that changes the composition of pre-existing rocks over many millions of years. Heat from the earth's core and/or pressure from moving tectonic plates compress and bury rock in the earth forcing the changes.

The level of metamorphism can be wide-ranging and determines the characteristics of the resulting rock and their mineral compositions.

**Is actinolite the same as asbestos?**

Asbestos is a commercial term for six naturally occurring fibrous, silicate materials. Fibrous actinolite is one of these six known asbestos materials.

Non-fibrous actinolite is not an asbestiform material and is low risk to human health.

**What is the difference between fibrous and non-fibrous actinolite?**

Fibrous actinolite (also known as asbestiform actinolite) presents as parallel-sided, micro hairlike structures and the fibres are flexible.

Once these fibres are airborne it is known to be harmful to human health as the flexible, micro hairlike fibres can lodge in the lungs, leading to disease.

Non-fibrous actinolite presents in long, slender, crystals (known technically as acicular) and are hard and rigid. It is low hazard and is generally not considered harmful to human health.

**How is the risk of actinolite managed at Holcim sites?**

If actinolite is detected at any Holcim site a comprehensive review and detailed testing is undertaken with an expert consultant to assess the type, concentration and risk to human health.

If required, a suitable management plan is developed and implemented in accordance with all statutory regulations.

**References**

Ilgren, E. B. (2004). The Biology of Cleavage Fragments: A Brief Synthesis and Analysis of Current Knowledge. Indoor and Built Environment, 2004.

Lippmann, M. (2014). Toxicological and epidemiological studies on effects of airborne fibers: Coherence and public health implications. Critical Review Toxicology, 2014; 44(8):643 -695.

Department of Mines and Petroleum (2015). Management of fibrous minerals in Western Australian mining operations – guideline (2nd edition): Resources Safety, Department of Mines and Petroleum, Western Australia, 47 pp.

## **Actinolite at Beenleigh Quarry**

### **Is actinolite found at Beenleigh quarry?**

Fibrous actinolite is not present at Beenleigh quarry.

Trace amounts (averaging 1-2% by microscopic analysis) of the non-fibrous form of actinolite has been observed at Beenleigh quarries since the mid 90s. It is generally observed within the groundmass (that is "cementing" minerals) with numerous other minor minerals.

### **Is the actinolite found at Beenleigh harmful?**

Non-fibrous actinolite does not present health risks at low concentrations. Fibrous actinolite, the type that is known to be harmful to human health once airborne, has never been identified on site even with extensive testing.

Furthermore, the metamorphism required to create the fibrous form of actinolite, has never been observed in any quarried material at Beenleigh or throughout the quarry pit. As such, there is a very low likelihood of finding fibrous actinolite in the Beenleigh quarry resource.

### **What type of tests do you run to ensure the actinolite doesn't occur in fibrous form and how regularly do you test for other fibrous material?**

There have been almost forty reviews and reports carried out over twenty years specifically on the mineral composition of the extracted quarry products.

This provides us confidence about the abundance, nature and form of actinolite at Beenleigh, however we will continue to conduct petrographic or microscopic rock and other analysis on a regular basis.

Additionally, long term and regular dust monitoring tracks respirable particle levels - and this includes analysis for all fibrous materials.

The likelihood of actinolite occurring in a fibrous form at Beenleigh quarry given the reports to date and knowledge of the local geology is very low.

Our site management plan is regularly reviewed with consideration given to geological and mineral composition and possible changes over time and location.

We do this as we believe we have an obligation to monitor to a high standard, often greater than required under national or state regulations, to ensure the absolute safety of our people on site and our local community.

We will continue to monitor and review the mineral content of our quarry products and will also include periodic testing of the mineral composition as part of our airborne dust monitoring going forward.

**How long has Holcim known about actinolite at Beenleigh and why haven't we been told before now?**

As non-fibrous actinolite poses a low risk and not considered hazardous to human health, this has not been considered an issue to report.

Actinolite was first reported at Beenleigh in the mid 1990s and only in very small percentages. Since then Holcim has undertaken almost forty reviews and engaged various experts to monitor and manage the material.

Long term and regular personal and environmental dust monitoring provides also supports ongoing material management plans.

**What safety measures are in place at Beenleigh quarry?**

Like all our operations, safety is extremely important and all our people are expected to comply with all our safety and environmental procedures.

Beenleigh quarry has a Dust Management Plan and various long term mitigation measures have been in place including enclosed crushing plants and dust suppression systems and procedures.

Airborne dust monitoring occurs on a regular basis in compliance with our operational approval. 10 dust deposition monitors are used with 6 being located around the quarry boundary and 4 being placed at sensitive receptors within the local community. Samples are retrieved and tested on a monthly basis and any non-conformances reported to DEHP.

It's important to note that our people work much closer to any dust source and our first concern is with their health, safety and wellbeing. We would never want to expose our colleagues and friends to unsafe or harmful concentrations of dust. It is important that exposure to any form of dust is controlled.

Personal exposure is closely monitored, as required under regulations, and no adverse health effects have been recorded with our people working on site.

**What else are you doing about it now?**

Considering the recent concern generated by Hanson's Wolffdene quarry extension application, Holcim has completed another internal review of actinolite at Beenleigh quarry.

Following this review we remain confident of the low risk associated with actinolite at Beenleigh quarry.

To further support this, DEHP in consultation with the local community, Cement Concrete and Aggregates Association (CCAA) and industry operators including Holcim are undertaking independent airborne dust studies in the local area.

Further information including the timeframe and publishing of results from this study is expected to be made available from DEHP for review.





# Community Consultative Committee

Meeting report

Beenleigh Quarry

Meeting date	26 August 2016
Location	Holcim Beenleigh Quarry, 134 Peachey Road, Luscombe
Attendees	49 Sch 4
Apologies	
Author	

Item #	Agenda Item	Discussion points, outcomes and actions
1	Meeting open and welcome	<ul style="list-style-type: none"> <li>• [redacted] opened meeting at 10.15am</li> <li>• Warm thoughts go to [redacted] to attend today</li> <li>• Acknowledgement of Traditional Owners</li> <li>• Apologies and attendance noted as indicated above</li> <li>• Official apologies received by [redacted] and [redacted]</li> <li>• Introduction of [redacted] Holcim SEQ Operations Manager, who joined the meeting today to learn more about community concerns and feedback.</li> </ul>
2	General business	<p><b>Meeting days and times</b></p> <ul style="list-style-type: none"> <li>• Further discussion re meeting days and times to best enable people to attend the meeting. [redacted] mentioned Wednesday mornings would suit [redacted] better and [redacted] suggested alternating meeting dates and times as a trial. All in attendance agreed a good idea to trial.</li> <li>★ <b>ACTION: Incorporate alternate meeting dates starting next meeting as a trial. Gather feedback from this and reassess at later point.</b> [redacted]</li> </ul>

3

**Issues**

**Dust management**

*Summary*

- Holcim acknowledges recent community concerns and complaints around dust.
- Complaints have been investigated by Holcim and Qld Department of Environment and Heritage Protection (EHP) who regulate compliance with the site's Environmental Authority.
- EHP have closed the complaint based on information provided by Holcim including monitoring data and Holcim's commitment to a series of actions to further reduce dust emissions.
- Holcim maintains it is compliant with the site's Environmental Authority but is committed to making further improvements to dust management.
- Monitoring being reviewed and added to, in particular EHP have suggested another dust deposition bottle be placed at residence on Vennor Drive about half way up.
- EHP have also requested PM10 monitoring, a different type of dust monitoring that requires power, at a suitable dust sensitive receptor in the vicinity. Holcim will get in touch with residences in the identified locations to request approval.
- offered for PM10 monitor at  house.
- raised the fact that there is a lot of development going on in the area with large areas cleared so all dust is not from quarries.
- General discussion about other cleared and exposed areas in the area and how they may be affecting dust at local residences.
- All in attendance encouraged to hear what Holcim have done so far and are committed to do moving forward about the dust.
- General discussion about communicating this better with wider community. Holcim will be trying to make contact with residents on Vennor Drive in relation to dust management and potential for monitoring at their residences.

*Monitoring results*

- Dust Monitoring Summary sheet showing last twelve months of monitoring results at local residences and committed actions provided.
- All results compliant with Environmental Authority.
- This will be uploaded to the website.

*Next steps*

- Holcim to progress agreed actions with EHP.

**Blast management**

- Blast monitoring results table provided and discussed.
- All results within compliance limits.

- General discussion around operational procedures and management of blasting in relation to impacts including dust.
- [49 Sc] and [ ] gave a summary of the protocols and procedures for blasting.

**Southern Resource Lands**

*Bushfires*

Irrelevant 73(2)

*Trespassing*

Irrelevant 73(2)

DS/RTI Release



6	<b>Member feedback and Open forum</b>	<ul style="list-style-type: none"> <li>• General member feedback provided throughout session.</li> <li>• Further discussion and agreement to trial alternate date for next meeting and extend offer for end of year lunch as was done last year.</li> </ul>
7	<b>Meeting closed</b>	<ul style="list-style-type: none"> <li>• Next meeting agreed to be scheduled for <b>Wednesday, 23rd November (10am to 12pm)</b> followed by lunch at Shearers Arms.</li> <li>• ACTION: Prepare and circulate meeting report to OCC members. <input type="checkbox"/></li> <li>★ ACTION: Prepare and circulate draft agenda at least one week prior to next meeting. <input type="checkbox"/></li> <li>• <input type="checkbox"/> 49 Sch 4 closed the meeting at 12.50pm</li> </ul>

DSIT RTI Release

## Dust monitoring summary

Beenleigh Quarry | August 2016

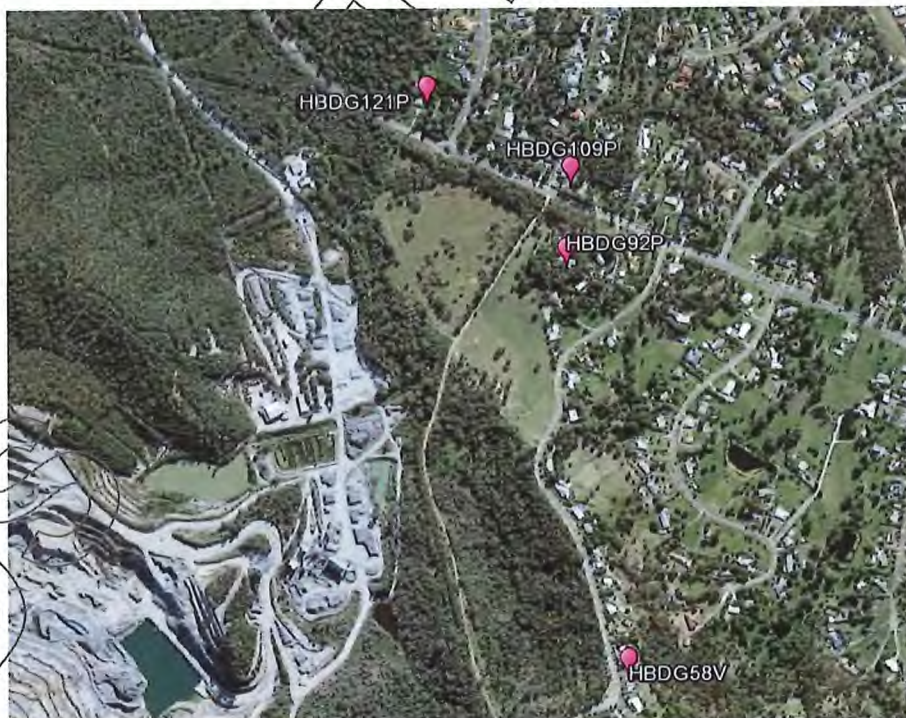
Holcim Australia takes dust management at all our operations very seriously for the safety of our people and the local communities in which we operate.

At Holcim's Beenleigh Quarry, airborne dust monitoring occurs on a continual and volunteer basis at eleven locations, six being located around the quarry boundary that are used for site management and four placed at sensitive receptors within the local community. The results of the dust sensitive receptor monitors are included in this community summary.

Samples are retrieved and tested on a monthly basis by an accredited scientific laboratory. Monitoring analysis is carried out by Groundwork Plus. Any non-conformances are reported to the Department of Environment and Heritage Protection, the regulatory authority. Monitoring is carried out in accordance with *Australian Standard AS3580.10: Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter-Gravimetric method.*

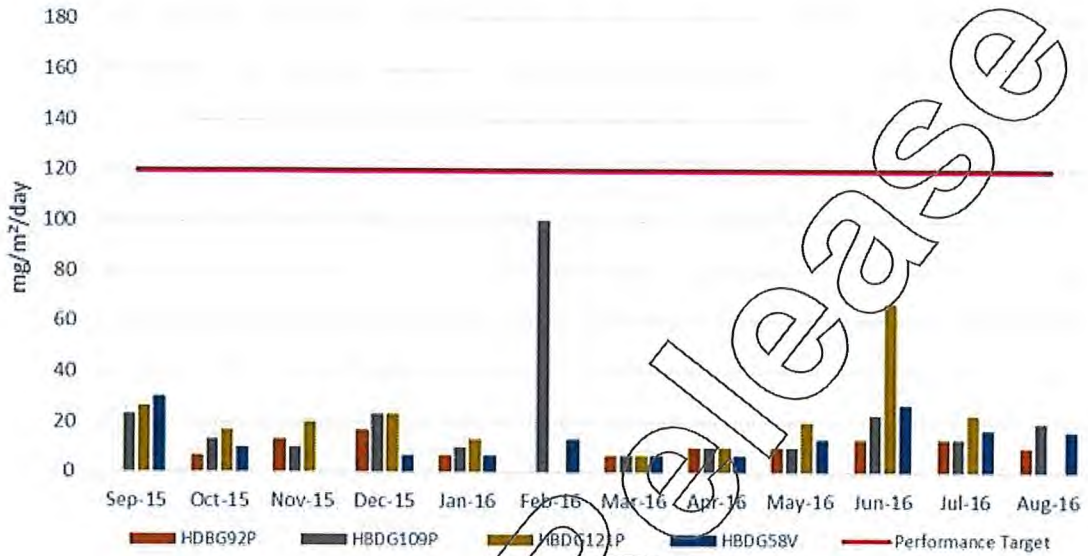
### Monitoring locations

Markers below show the locations of community dust deposition monitoring.



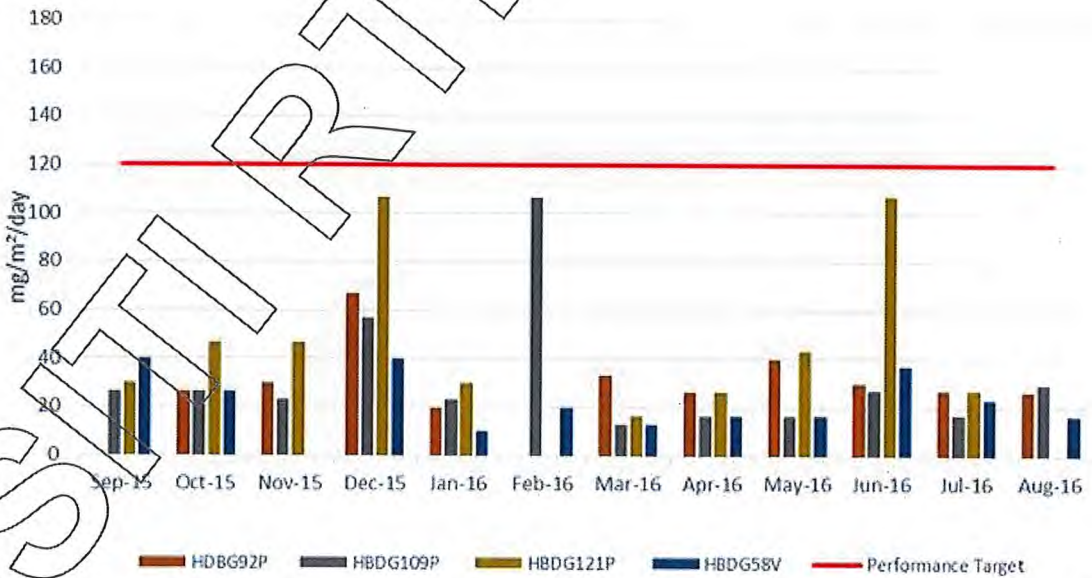
**Results - 12mth trend**

Ash Content (Non-combustible material i.e. dust from dirt road etc...)



Note: HBDG121P dust deposition bottle was decommissioned on the 20 July 2016 at the request of the owner for personal reasons. Additional dust deposition monitoring locations will be sought as a replacement including an additional location on Vennor Drive.

Total Insoluble Material (ash content + combustible organic material i.e. organic material, leaves, pollen, bugs)



Note: HBDG121P dust deposition bottle was decommissioned on the 20 July 2016 at the request of the owner for personal reasons. Additional dust deposition monitoring locations will be sought as a replacement including an additional location on Vennor Drive.

**Summary - September 2015 to August 2016**

Throughout the twelve month period from September 2015 to August 2016, the results of all dust deposition gauges located in the community to the east of the Site complied with the 120 mg/m<sup>2</sup>/day dust deposition limit stated in site's Environmental Authority.

### Update on additional dust control measures

Holcim has recently become aware of dust complaints from the local community. Holcim takes responsible environmental management very seriously and has over the years implemented a number of permanent and operational dust control measures to address previous community concerns. In light of the ongoing concerns, Holcim has committed to the following actions in order to further reduce any potential dust impact on the local community:

- Reduce speed limit on quarry entrance road to 20kph. (Completed)
- Increase use of street sweeper (Completed)
- Increase water cart use on main entrance road (Completed)
- Hose down outside of crushing plant shed (Completed)
- Installation of CoolFog™ on mobile crushing equipment (Completed)
- Implement automatic notifications from on site weather station (Completed)
- Install cameras for real time monitoring of dust emissions over quarry plant and stockpiles (Completed)
- Review of impact monitoring by an air quality expert to gain a better understanding of the impacts and track improvements. (Underway)
- Review long term wheel washing system options as part of air quality expert review. (Underway)
- Review of dust generating activities and management procedures by an air quality expert to provide recommendations on additional measures for dust control. (Underway)
- Review the location of dust deposition gauges with the view to install an additional monitor closer to or along Vennor Drive to cover additional sensitive receptors. This will be undertaken by Holcim in conjunction with the review by the air quality expert
- Commence PM10 monitoring (requested by EHP) once sensitive receptor locations are approved. (Underway)
- Communicate review findings to stakeholders. (October)

The timeframes noted are indicative and may change depending on full scope of reviews and availability of consultants and/or potential equipment.



Watercart release on haul road.



Water sprays and Coolfog™ systems in use that can appear to look like dust, especially in the afternoon sun.

### Further information

Contact Phil Dukes, Beenleigh Quarry Manager, on 0429 791 202 to provide feedback or request further information.

Additional information on the quarry operations and community participation can be found on our community website [www.holcim.com.au/beenleigh](http://www.holcim.com.au/beenleigh)





## Beenleigh quarry working towards further dust improvements

03.Sep.2016

We have recently become aware of dust complaints from the local community. Holcim takes responsible environmental management very seriously and has over the years implemented a number of permanent and operational dust control measures to address previous community concerns.

In light of the current concerns, Holcim has committed to the following actions in order to further reduce any potential dust impact on the local community:

- Reduce speed limit on quarry entrance road to 20kph. (Completed)
- Increase use of street sweeper (Completed)
- Increase water cart use on main entrance road (Completed)
- Hose down outside of crushing plant shed (Completed)
- Installation of CoolFog™ on mobile crushing equipment (Completed)
- Implement automatic notifications from on site weather station (Completed)
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- Review the location of dust deposition gauges with the view to install an additional monitor closer to or along Vennor Drive to cover additional sensitive receptors. This will be undertaken by Holcim in conjunction with the review by the air quality expert. (Completed)
- Commence PM10 monitoring (requested by EHP following recent complaints) once sensitive receptor locations are identified and approved. (Underway)
- Communicate review findings to stakeholders. (October)



Coolfog in operation.

The timeframes noted are indicative and may change depending on full scope of reviews and availability of consultants and/or potential equipment.

Contact Phil Dukes, Beenleigh Quarry Manager, on 0429 791 202 to provide feedback or request further information.

View Twelve Month Dust Deposition Monitoring summary



Water cart in operation.

[Return to news overview](#)

### Community Enquiries

Phil Dukes

### Products and Sales

Phone 1300 555 277

