

Mt Coot-tha Local Residents
Chairman – Philip Best
3 Sir Samuel Griffith Drv. Mt Coot-tha, Toowong Q 4066
p: 0411-123400 e: PhilBest313@gmail.com
11th October 2018

On behalf of the Mt Coot-tha Local Residents, this is a response to [the two-page letter written by Asphalt & Aggregates Manager](#) Mr Terry Bird (TB) written on the 10th November 2017, which refers to a meeting between him and your department on the 29th August 2017. This also refers to the previous letter from the DES on the 30th August 2016. Both letters to the BCC asked that the quarry voluntarily reduce their blasting limits - to which the BCC simply said No.

Paragraph 2:

This is the primary or first response letter paragraph from TB, where he refers to the fact that there is only one resident. This is incorrect, our group is the Mt Coot-tha Local Residents (MCLR) which includes every resident in the 80 homes which are located including and to the south of Birdwood Tce and to the north of the Mt Coot-tha Quarry (MCQ).

I am simply the current Engineer and Chairperson of this group, who are all united in the cause of stopping the MCQ renegade and illegal operations.

TB also refers to the unspecified research which states that cosmetic damage may occur to light framed residential structures at levels greater than 75mm/sec ppv.

1. Why did TB not state what this research is and where it is from?
2. His statement simply states that damage may occur and has no concept where damage will not occur.
3. There is no concept of the total blast counts.
4. If the 75mm/sec was measured beside Mt Coot-tha, then inside our home it would be an incredible 195mm/sec.
5. Using the [Seismic Research example](#), a common 10 level building would experience 300mm/sec at vibration antinode points somewhere towards the top of the building.
 - Some 60 times the Australian and state maximum of 5mm/sec.

Paragraph 3:

TB states that "Council is compliant with its environmental Authority EPPR00447313" and hence the BCC will not agree to amend its approval.

1. We have proven beyond all reasonable doubt that this is not true.
2. There is no valid reason why the blast vibration levels should not be reduced.

Background Paragraphs 4, 5, 6, 7, 8, 9:

TB states that MCQ has been operating for more than 100 years, whilst the USBM refers to the effects of prolonged blast counts as "Fatigue" which they say reduces the vibration tolerance by half. TB also states that operations would need to be changed, but this is meaningless because he does not provide any details. (In the previous 2016 letter, it was stated incorrectly that residents would not want more smaller blasts. This is entirely untrue and was the process in the previous century).

Other quarries operate successfully within the state and national maximums, which specify a maximum of 5mm/sec (95%) and 10mm/sec (5%). This is also the maximum in other Australian States and many other countries overseas.

Why should MCQ be treated differently?

Paragraph 10:

TB states the Australian and International standards which all indicate levels of vibration that are protective in infrastructure integrity”.

1. This is not true.
2. Industry.gov.au states clearly that there is no Australian standard which defines the blast vibration levels which will not cause damage to buildings.
3. Table J4.4.2.1 does not refer to protection of cosmetic damage. It only provides an unspecified guide which was imported from BS7385.
4. BS7385 is dated 1995 and uses unspecified experimental data from the floppy disk era. It also clearly states exclusions for their data. The way homes are built in Australia today are absolutely different in hundreds of ways.

Paragraph 11:

TB again says that the BCC does not accept the basis of our claims.

TB agrees that MCQ will not exceed the upper level of permissible vibration data in Table J4.4.4.2.1, however this table does not at all define what he claims.

TB agrees to pledge that MCQ will not exceed the blast vibration levels detailed in Table J4.4.4.2.1, and will reassure any resident who is concerned about the upper limits to blast vibration.

Conclusions:

1. TB has not substantiated the research claims made in Paragraph 2.
 - a. Standards Australia states clearly that all the data values and text in AS2187.2 Appendix J is only ever to be considered advisory and hence does not contain any statutory or compulsory information.
2. Private home ground vibration at 75mm/sec and blast counts of several thousand is unheard of and completely off the scale in any known blasting standard (except at Mt Coot-tha).
 - a. The MCQ blast count since c1995 is approx. 800
 - b. The MCLR believe that the total MCQ blast count would be several thousand.
 - c. AS2187.2 does not consider blast counts above 20.
 - d. BS7385 has no concept of any blast counts.
 - e. USBM describes multiple blasts as Fatigue which severely reduced a building strength, plus footings in the same blasted strata is outside their consideration.
 - f. Repeated blast vibrations at the level of 75mm would easily demolish common Australian 0.6mm steel framed homes.
3. TB seems to be highly inaccurate and it is a major concern that the BCC Asphalt and Aggregates manager is making vast claims which are untrue and have no real basis.
4. TB and MCQ manager Robert Bell (RB) have both been asked to monitor blast vibrations and noise in private homes, but they always state that their policy is to never do any monitoring on private property or land.
5. Quite apart from all this is the concept of damaging MCLR personal possessions and we have previously described the problems with some electronic equipment including mechanical Terabyte Hard drives which have tiny magnetic track widths around 100nanometres and can corrupt their data simply by shouting (FYI: Human DNA width = 2nanometres).
6. Even if exhaustive tests were done on one Mt Coot-tha home, this cannot technically or legally be applied to any other home in the same area, unless their construction, footings and location were identical (which they definitely are not).
 - a. At Mt Coot-tha every home is bespoke and many are perched on steep rocky land.
 - b. Almost every home is founded on the same bedrock as that which the quarry is blasting.
7. All homes containing any asbestos fibre products, should be carefully inspected for loose fibres caused by strong vibrations, over the sustained 100-year period that TB defines.

References:

[AS2187SoundPressureLevels](#)

[AS2187ApxJ-12monthsOr20Blasts](#)

[USBM-Fatigue-Soil-Footings-ConstructionTypes-AllRelevant](#)

[BS7385-2 UsageOfExperimentalDataFromAnUnspecifiedCountry](#)

[BS7385-Page1-GuidanceOnDamageToBuildings](#)

[PreventionOfDamageToBuildings-AS2187andBS7385](#)

[AS2187-2-Table-J4-4-2-1-BS7385TransientVibrationGuideValues](#)

[BS7385TransientVibrationGuideValues](#)

[EP-Act-2016-Section-440ZB-Blasting](#)

[AustralianIndustryGroundVibrationMaximums](#)

[BS7385-IgnoresTheIndirectEffectsOnBuildingsAndPeople](#)

[EHP-Section-73C.pdf](#)

Yours Sincerely, Philip Best.
MCLR Chairman and Engineer.