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Sent: Friday, 26 October 2018 7:10 AM
To: directorgeneral@des.qld.gov.au; environment@ministerial.qld.gov.au
Cc: 'Maiwar Electorate Office'; Isobel.Roe@abc.net.au; David Hassall; 'Mailbox Ombudsman'; 'Bronwyn Bell'; 'Juanita Williams'; BrisbaneSARA@dsdmip.qld.gov.au
Subject: Formal Complaint Regarding the Brisbane City Council owned and operated Mt Coot-tha Quarry
Attachments: DES-MattKarle-27June2018.jpg; MtCootthaLocalResidentsComplaintToQLD-DES-DG-October2018.pdf

Dear Director General,

On behalf of the Mt Coot-tha Local Residents (MCLR) and after an period of several years Mt Coot-tha Quarry investigatory work plus a further 18 months of full time work, we wish to lodge a serious formal and enduring complaint to your department and the DES Complaint Management System, against the Brisbane City Council (BCC) Mt Coot-tha Quarry (MCQ) for Gross Non-Compliance of their Environmental Authority (EA), over a sustained period of 18 years.

We demand that the BCC MCQ be urgently advised that they must immediately and fully comply with:

- Their EA Schedule F conditions.
 - As these conditions are written and
 - As supported and reported by the EDO lawyers.
- The 2016 and 2017 requests from EHP Director Andrew Connor that they comply with current standards,
 - plus conduct meaningful community consultation.

In creating this complaint, we have tried very hard for several years without any income, to be totally and completely honest.

- There is no gain at all for us in creating untruthful, fabricated or inaccurate information.
- Hence we proceed with this complaint after several years of expensive and indeed extremely stressful work as we uncovered layer upon layer of untruthful statements and corrupted data.
- We have very serious concerns regarding the honesty and impartiality of your department and particularly the BCC and MCQ where almost any kind of reactive untruthful smoke-screen response appears to be embedded common practice.

In actioning this complaint, it is not appropriate that any of the persons involved in any of the decisions regarding the above Matt Karle letter and the Related RTI data obtained, be involved in any decision making.

- We have totally lost faith in the honesty and impartiality of these DES employees.

About the MCLR:

We are the families who reside in the [80 private homes who live in the Mt Coot-tha urban area](#), bound to the north by Birdwood Tce and Richer St.

In c 2000, the local residents in this area previously created an action group and at some later date John Higgins (JH) became their second chairman.

- Being a local resident of the area, in 2010 JH appointed me to be their engineer and secretary, for the purpose of investigating what the residents already knew:
- The blast vibration effects in or on the homes were many times stronger than what the Brisbane City Council (BCC) Mt Coot-tha Quarry (MCQ) was reporting to DERM/EHP/DES (DES).
- In 2017, after devoting himself to the Quarry Activities, JH died unexpectedly and the local residents asked myself ([Philip Best](#)) to continue as the new residents group chairman.

1. Initially the engineering role required substantial learning of the [methods and theory about blasting, as well as at Mt Coot-tha](#).

2. The effects on the residents living inside their homes when the blast hit was horrendous.
 - a. Many residents described the blast shock wave as “like a bomb hitting their homes”, whilst shift workers were disturbed and thus becoming angry.
 - b. We can assure you that this is absolutely true and [the detrimental mental health effects are very strong](#).
3. In response to this and prior to beginning our Mt Coot-tha constructions, the BCC provided us with a [letter signed by their Asphalt Dept Manager Chris Lange](#) assuring us that the blast vibration levels emitted by the quarry were far lower than what could ever damage a private home.
 - a. This was circulated to every resident and the indication was that no special precautions were needed
 - b. No Brisbane engineers or building designers knew anything about blasting effects or process.
 - c. It is almost impossible to find any Australian civil engineer who has had blast vibration experience.
 - d. At the time of this letter, MCQ was grossly corrupting their government regulatory blast vibration footprint and keeping secret the much higher locally measured levels.
4. In 2011 upon analysing the blasting methods, we uncovered a large amount of relevant information.
5. The MCQ used Heilig Pty Ltd contractors to measure the blasts at [the much further away locations of Sussex St & Richer St](#)
 - a. Both these locations and their transducer application were [as specified by the BCC and MCQ](#) (hence the monitoring was not independent).
 - b. As everybody knows and is confirmed in the EHP/DES Noise Monitoring Manual (NMM), [all noise gets fainter as you move further away from the source](#) and the BCC used this to provide grossly [misrepresent their government blast vibration footprint reporting](#) to the DES.
 - c. The BCC MCQ used this factor to blast much stronger, but still report their blast vibration footprint (as measured by a contractor) to be within the terms of their [SR0041/ IPDE00920708/ EPPR00447313](#) Blasting Environmental Authority (EA) (Schedule F).
 - d. BCC & MCQ also monitored near their weighbridge office, which would have indicated what life was like at the closest homes and historical items.
 - i. However this information remained hidden from DES, so as not to restrict their overall blasting strength.
 - ii. It was also not provided to the residents via their RTI requests.
 - iii. No notice of blasting was provided to residents, so the he noise and vibration came totally unannounced.
 - e. BCC continued to allow residential change of use from Rural to Residential, plus they approved the home constructions, opposite the Quarry boundary.
6. We contacted DES officers asking why there was never any regular monitoring done at the homes closest to the blast zone.
 - a. After [many attempts](#), we finally convinced [DES Tim Adams to order that monitoring must be done at the closest homes](#).
 - b. The first misrepresented blast vibration reporting had thus been uncovered and a [permanent blast monitoring site](#) was established beside Mt Coot-tha Rd (MCR) (159MCR).
 - c. The effect of this was a drastic reduction of blast strength, however there was no consideration of any penalty towards the BCC and MCQ or consideration for residential damage.
 - i. At this stage [the MCQ blast count was c 600](#), with the real count being some tens of thousands.
 - ii. Somehow c1997 the MCQ blast count was reset back to zero.
 - d. We were later to find that this blast vibration difference was approximately 300%, hence a 10.11mm/sec blast measured at Sussex St could be above 30mm/sec at the private homes closest to the blast zone, (plus as mentioned below inside the residents personal homes a further 2.5 times higher again).
 - e. The blast vibrations inside the homes at this time [would have felt like a minor earthquake](#).
7. In 2012 & 2013 the residents again complained that the vibration & noise inside the homes indicated that the blasting was still much stronger than what was being reported by the BCC MCQ to the DES.
8. The residents approached Andrew Fraser with complaints that [the measured noise inside the homes was considerably higher than the specified limit](#).

9. At our only meeting with the BCC and DES, we were advised by DES officers that this noise was an overpressure sonic boom noise, of which the limit was much higher than what we reported.
10. We again argued that [the internal home noise could not possibly be an overpressure atmospheric concept and was therefore grossly illegal](#).
 - a. At the meeting, the DES officer overruled us saying that their policy was: This internal home measured noise would only be considered as overpressure atmospheric noise.
 - b. This was clearly incorrect, but there was nothing that the residents could do at the time.
11. During 2014, 2015 & 2016 we submitted [three separate change applications to Standards Australia](#) with several valid reasons why the blast monitoring Appendix J in AS2187.2 should be changed.
12. Our arguments listed important additional factual & relevant conditions such as: [high blast counts](#), [historic buildings](#), [tall building resonance](#) and [electronic equipment](#) which were totally absent.
 - a. Our change project was supported by the Institute of Engineers Australia, The Institute of Architects Australian and the Catholic Church Asset management (incl. Stuartholme).
 - b. QLD EHP Director partially supported these changes.
 - c. AS2187.2 is due to be retracted or removed this year.
13. In 2015 & 2016 we noticed that our very new home, which we had very carefully designed and lovingly built as a family self-build, [had developed severe floor cracking](#). The damage seemed to be from the MCQ blast vibrations because:
 - a. This floor had stronger and thicker concrete than the design specifications.
 - b. A Mechanical Engineer advised that the cracks were not in the normal location, they exceeded those specified for shrinkage, plus their locations were not normally associated with shrinkage.
 - c. The concrete floor had been designed by a reputable Brisbane Civil Engineering company and approved by both our Project Engineer and our Certifier.
 - d. To this day it has never been used or driven on.
 - e. It would have been subject to extremely strong blast vibrations, extrapolated to be above 25mm/sec, and hence far in excess of any statutory limit.
 - f. The USBM standard specifies a concept called Vibration Fatigue, which applies when a large number of vibrations are experienced (such as at Mt Coot-tha)..
 - g. They specify as much as 50% and we have shown this on [the 3rd May 2018 Instantel Minimate Mt Coot-tha vibration data](#) chart.
14. Upon contacting the BCC Lord Mayor, they said to [lodge a complaint with their JLTA Lawyers](#), which we did. (This has never proceeded and is ignored by JLTA).
 - a. With each series of very strong blasts, [the cracks became longer and wider](#).
 - b. A 7mm high bulge appeared in our slab after the massive 3rd August 2016 blast.
 - c. As of today this slab has never been used and sits waiting for JLTA lawyers to proceed,
 - i. Normally JLTA have a single cause and effect claim and are not equipped for a claim which is ongoing and controlled by a BCC works department.
 - ii. This being in an environment where the damage event repeats every one or two weeks and supposedly continuing until c2032.
 - d. After more than 2 years, we continue to wait for some finalisation of this case, whilst our cars sit outside developing rust and fading paint.
 - e.
15. In July 2016 the [Local Residents had a meeting at Steven Miles Electorate Office](#), to consider the damage being done to the local residents homes.
 - a. Afterwards, the EHP [Director wrote to BCC MCQ](#) asking them to [reduce their blasting to the current state maximum](#).
 - i. They were also asked to conduct meaningful community consultation and mediation (they do nothing at all).
 - ii. BCC replied blatantly refusing these fundamental compliance requests.

- b. A few days after this meeting on the 3rd August 2016, the BCC MCQ did a blast [which was measured as 10.4mm/sec at Mt Coot-tha Rd \(MCR\)](#).
 - i. On this same day, the local residents hired an [NTI-Audio XL-2 NATA approved Decibel Data-Logger](#) metre, to measure the extreme noise generated inside the homes from the blast vibration.
 - ii. This was [supplied by NV Engineers](#) (NVE) in Camp Hill Brisbane and a [set monitoring procedure](#) was established.
 - iii. NVE [setup the datalogger](#) so [all we did was switch it on](#), go out of the home, return to the home after the blast, switch off and immediately return the datalogger back to NVE of Camp Hill.
 - iv. The following day NVE downloaded the datalogger data and emailed the results to the residents.
 - v. Plotting the [data on an excel spreadsheet](#) indicates that the home continued to vibrate for many seconds (possibly 30 seconds) after this massive blast.
 - vi. Around this time our Electorate Office had obtained a list of recent MCR blast vibration readings and we knew in our own hearts that the blast footprint reporting by BCC MCQ to DES was again being misrepresented.
 - vii. Clearly [the noise inside the homes could never be from any atmospheric event](#), which typically lasts only one second.
 - viii. We were later to find out that [the extrapolated blast vibrations for that date](#) actually [inside the private home were stronger than 25mm/second](#), which explained the huge noise reading.

2016 Council Listens Forum.

16. In August 2016 at the Kenmore Library, some local residents attended this forum and afterwards at the tables, they spoke personally with Cr Matic and LM Quirk showing photographs and explaining the damage to their homes.
 - a. They desperately pleaded separately with both Cr Matic and LM Quirk, to stop damaging their precious homes with strong blast vibrations.
 - b. LM Quirk wrote back stating that [they will continue operating the quarry without any changes](#).
 - c. All our photographic evidence and pleading was ignored.

The EHP & BCC MCQ RTI Requests:

17. During 2016-2017 the Local Residents conducted and paid for several BCC MCQ RTI Requests.
18. Having been completely ignored by Cr Matic and LM Quirk, the residents began to study the [RTI requested data](#), to obtain as much blast vibration data as possible.
 - a. A [large part of our request was refused](#) by the BCC on commercial confidence grounds, however [Cr Judy Magub had previously supplied most of this data](#).
 - b. Using the EHP/DES department as well, we obtained MCQ blast vibration measurements from 2001-2017, but this did not include the BCC MCQ weighbridge measurements.
 - c. We supplied this data to two [statisticians, who provided reports](#) stating that [BCC MCQ clearly misrepresented their blast vibration footprint reporting](#) to DES for 600 blasts.
19. In late-2017, the residents completed writing [an Extensive Mediation Style PDF document to the Lord Mayor](#) which included all the MCQ RTI data.
 - a. The document asked for a MCQ management committee to be setup.
 - b. The document included the [Key Resource KRA-42 which has zero separation zone](#) to the residential area and historical homes and monuments.
 - c. As some of the local residents had court and legal experience, they went to extraordinary lengths to ensure that everything in the report was totally true.
 - d. The report contained several reports and [photographs from residents, whose new homes were damaged by blast vibrations](#).
 - e. The [Lord Mayor dismissed our report as containing errors](#), however he would never state what or where the errors were.

The 2017-2018 Internal Home Blast Vibration Monitoring Program:

20. In December 2017 the Local Residents began a series of internal home [blast vibration monitoring sessions](#) using a Saros Instantel Minimate.
- a. As of June 2018, they had recorded [10 monitor readings](#)
 - i. The first one was a scoping study close to the BCC MCQ MCR permanent monitoring site (the same corner block property address).
 - ii. 8 further readings were done at the same location.
 - iii. 1 was in a mining engineers home just below Stuartholme, which had recently shown non-shrinkage concrete cracking.
 - b. Using the 8 readings, this showed that the blast vibrations measured inside the MCR home were [c 2.5 times stronger than those measured beside MCR](#) (a Local MCR Comparison).
 - i. The variance between the home and BCC monitoring was a very low 0.03mm/sec, which indicates comparable monitoring quality.
 - ii. Those below the much further away Stuartholme area, showed approximately the same as reported by MCQ for MCR.
 - c. These internal home blast vibrations can then be extrapolated to the 3rd August 2016 blast, which indicates that a vibration level of more than 25mm/second was experienced inside the private homes.
 - i. More than 5 times the [QLD-EHP/DES](#), [Australian](#), [NSW](#), [Victorian](#) and [ANZEC](#) maximums (9 of 10 or 19 of 20 blasts).
 - ii. More than 12 times the TMR Historic Building and Monument Maximum and ANZEC Recommended Long Term Maximum.
 - iii. *Note that the number of blasts done at Mt Coot-tha is into the thousands, however none of these documents consider the USBM stated vibration fatigue concept.*
 - d. The spreadsheet data shows that [many other very strong blasts have occurred between 2001 and 2017](#).
 - e. For example, an 8mm/sec blast measured at MCR monitoring point would therefore equate to 20mm/sec inside the adjacent homes.
 - i. This is 10 times [the TMR Historic Homes](#) and Monuments maximum.
 - ii. and 5 times the normal [QLD EHP-DES](#), [Australian](#), [NSW](#), [Victorian](#) and [ANZEC](#) maximum
 - iii. and double the absolute maximum for the above regulators.
 - f. When considering the blasts done prior to Blast 600, where the MCR value was approximately 3 times the reported values, it is possible to arrive at a compounded internal blast vibration value which is a multiple.
 - i. This indicates that in 2002 when 10mm/sec was reported at Sussex St, that the values on MCR may have been in the region of 30mm/second, plus inside the homes this might have been another 2.5 times stronger (possibly 75mm/sec total) which we believe would exceed minor earthquake conditions.
 - For the [Cobb & Co historic home](#) and the cemetery monuments, this would have been more than 30 times the specified historic maximum blast vibration.
 - The iconic and historic Stuartholme is within the non-existent 500m KRA separation zone, it is usually hit by around one third of the blast vibration levels at MCR.

The June 2018 letter from DES Compliance Manager, Mr Matt Karle:

21. In Mr Karle's letter there were several untrue or misleading statements where he refers to:
- a. "Complaints regarding 3 Sir Samuel Griffith Drv" (3SSGD), this is untrue.
 - i. The complaints refer to the entire 80 homes in the Mt Coot-tha Area, where the owners have been fighting the BCC MCQ for almost 20 years.
 - ii. The residents were advised to use 3SSGD because this adjacent to the main BCC MCQ MCR permanent monitoring point (at the unused corner block address 159MCR).
 - iii. By using this same address it enabled the local residents to effectively make the sensitive receptor comparison over a 6-month 10-blast monitoring program.
 - b. "The department has reviewed our complaints" is also not fully true.
 - i. The local residents provided several damage photographs in our December Mediation Document and none of these have shown any sign of even been enquired about.
 - ii. One home opposite the quarry had a large number of cracks in concrete, tiles and plasterboard.
 - iii. The DES or BCC has never visited these places or even contacted the residents.
 - c. AS2187 discussion also is not relevant.

- i. Mr Karle knows only too well that we are happy with the actual standard and that our only disagreement is with the very old and purely advisory Appendix J.
 - This has no legal validity and is deficient in several ways which EHP Director Andrew Connor partially supported.
- ii. Mr Karle would also know that AS2187.2 is due for retraction this year because of its age.
- iii. Comparisons with other countries may be convenient, but the truth is that there is almost no correlation between homes built in UK, USA and Australia.
 - USA has very different seismic & weather conditions, whilst UK can be a bitterly cold wet island climate.
 - USBM considers vibration fatigue which [can be applied to Mt Coot-tha measurements](#).
 - Even within Australia, from Darwin to Hobart, there is a vast difference between latitude dependant building materials and styles.
 - It is virtually impossible to do simple comparisons between the wide variety of bespoke construction techniques, even just within the Mt Coot-tha urban area.
 - Construction styles vary enormously, plus there is a variation in building footing designs and soil/rock strata (Stumps or Slab, Clay or Bedrock foundations).
- iv. The way that homes are built in Brisbane has changed dramatically in the past 25 years, plus the electronic components housed and used inside are incredibly different.
 - For example, Terabyte Mechanical Hard Drive currently have trackwidths a third of the UV light wave length.
- v. For this reason, Standards Australia advise that their appendices are only advisory and have no regulatory or legal validity.
 - Hence Mr Karle has no right or precedence to claim any correlation of Mt Coot-tha private homes with Appendix J, which uses unsubstantiated BS7385 data from the days of floppy disks and data cartridges
- vi. Industry.gov.au states clearly that Australia has no standard at all for damage to homes from blast vibration, yet Mr Karle seems to promote an opinion that no blast damage has occurred at MCQ and without any inspection.
- d. "The monitoring we have done in our local resident private homes is not consistent with recognised methods".
 - i. This is totally untrue. There are at least 2 Blast and Seismic monitoring companies in Australia, which actively promote blast and seismic vibration monitoring inside buildings.
 - ii. One of them stated that there would be many thousands of internal building vibration monitoring sessions being done around the world every year.
 - iii. Plus the transducer clamp-fixing method we used is valid and commonly used. (This would give the same value as an epoxy glue bonding to a surface, but does not drill holes in resident's homes.
- f. "The department has not been able to establish non-compliance"
 - i. This does not mean that none exists and indeed the MCLR have provided all the necessary evidence with external statisticians and lawyers reports.
 - ii. In doing all our work, we consulted with relevant professionals and legal sources and are happy for follow up monitoring to be done.
 - We only began private local residents home blast vibration monitoring after Andrew Connor stated that the vibration amplification in tall buildings was a likely concern.
 - When we investigated this further, we found that there was a well-established standard rule that in a 10 level building that vibration amplification levels of 4 times could be expected. The unrestrained higher levels had a catch-up style whiplash effect and thus acted as an anti-node (like the middle of a skipping rope).
 - The EDO legal opinion of the EDO is that the building is an innocent vibration receptor.

22. Mr Karle stated that he was closing our case and passing this over to the QLD Ombudsman.

- a. The local residents object to this in the strongest terms.
 - i. The Ombudsman's office is a review and mediation organisation and never does compliance enforcement.
 - ii. The DES has to do the job of enforcing the BCC MCQ EA conditions.

- We understand these EA conditions imported (the text) directly from the original BCC MCQ blasting conditions (as written by the BCC for themselves).
 - We are advised at the EA creation time that the BCC promised to limit their blast vibration to approximately 5mm/second.
 - We believe that the current Schedule F conditions were written by the BCC into the original MCQ operating procedure for the purpose of protecting the local residents.
- iii. In these conditions the text states clearly and unambiguously several factors, which we have proven beyond reasonable doubt where MCQ is non-compliant.
- iv. Ourselves and our Lawyers agree that the Schedule F6 condition “or as measured in or on any noise sensitive place” requires the BCC MCQ to be compliant with the strongest readings that are measured in private homes.
- v. In using the Boolean OR Statement operator in a maximum value case, the text is clear that a lower reading at a selected point A can never overrule a higher reading at another noise sensitive place.
- Supposed maximum blast vibrations at Sussex and Richer Streets can never be stronger than those at the much closer MCQ weighbridge office and the post-bast-600 159MCR monitoring point.
 - The local residents here therefore expect that the DES department will convey and fully enforce the EA Schedule F conditions with the BCC, exactly as they are written.
23. The local residents have thus lost faith with Mr Karle.
- i. By closing our case he is stating that vibration levels at or above 25mm/second inside private homes is an acceptable practice, even with no consideration for USBM vibration fatigue.
- EHP Andrew Connor advises the high blast count numbers are a valid concern.
- ii. The situation where there is no specified legal maximum vibration on every 10th blast is completely unacceptable to the residents.
- We believe that the majority of Brisbane residents would agree that this is unacceptable.
 - It allows the MCQ to do 9 small blasts in a few days, followed by a massively huge one on the following day.
 - According to their EA license, they could repeat this sequence every week forever if they wanted.
 - It therefore become absolutely essential that the Schedule F conditions be adhered to, plus that they should comply with EHP EcoAccess & ERA-16 levels as requested of them by the EHP Director in 2016 and 2017.
 - Because the BCC and MCQ have ignored all the local residents mediation attempts and meeting requests, the residents have totally lost faith in their professionalism, ethical compliance and basic decency.

Summary:

We have proven beyond all reasonable doubt that the BCC MCQ is not adhering to the operational conditions as clearly stated in Schedule F of its EA. Hence we believe that it continues to operate illegally. Furthermore we believe that this has been the case for approximately 20 years.

- The BCC and MCQ have on many occasions refused or ignored requests for meetings with the residents. At the minister’s site meeting the aggregates manager Mr Bird, turned and abruptly departed when approached by the local residents.
- Schedule F of the MCQ EA clearly states “as measured in or on any [noise sensitive place](#)”, and the [EDO confirms that this is legally required](#).
 - However the BCC MCQ has refused and/or ignored every request for them to monitor inside private homes.
 - Hence the local residents were forced to go in their own direction and pay for all their own monitoring.
- Further information can be obtained from our www.BanTheBlasting.org website, which we spent hundreds of dollars and hours establishing.

Yours Sincerely, Philip Best and all the Mt Coot-tha Local Residents.
Chairman and Engineer, Mt Coot-tha Local Residents.

