PhilBest313@gmail.com

From:	Phil Best < PhilBest313@gmail.com>		
Sent:	Wednesday, 15 March 2017 6:41 PM		
То:	'CONNOR Andrew'; 'KARLE Matt'		
Cc:	Daniel Chidgey (Daniel.Chidgey@standards.org.au)		
Subject:	Enquiry from Standards Australia regarding changed to AS2187 Blasting and		
Attachments:	ABC-DrKarlVibrationCanKillHardDrives.jpg; BrendanGregg-		
	ShoutingAtHardDrivesCausesErrors.png; AustTuneliing-DrillAndBlastTable.png; BS7385-2_UsageOfDataFromAnUnspecifiedCountry.png		
Importance:	High		

Hi Andrew and Matt,

Below is the follow-up email that I sent out last Friday, it provides further clarification.

Please note that as soon as the quarry resumes normal activity with the typical stronger blasts, we will begin a series of blast vibration monitoring inside resident's homes.

We expect that this will show elevated vibration levels. Regards, Phil.

Dear AS2187 Stakeholder,

Some questions have arisen about the Standards Australia (SA) Process, so please allow me to clarify them. I have attached some documents regarding large mechanical hard drives, please consider how tightly packed and vulnerable the 10 Terabytes of data must be.

There is also a BS7385-2 screen shot, as well as the ATS Drill & Blast Table.

There is a strict SA procedure which we are following, this requires comments from 21 Approved Stakeholder Organisations which includes a broad spread of industry experts.

- 1. Write the Change Project Proposal. We did this last year.
- 2. Ask CE-005 List Approved Stakeholders on the approved list (of which you are one) if they believe there is any need for change. We recently did this.
- 3. Stakeholders should respond simply advising if they believe that AS2187 Appendix J should be modified.
 - Should the AS2187 Appendix-J Change Project proceed.
 - Any other comments if desired regarding the need for these or any other changes.
- 4. Response assessment by SA.
- 5. If SA considers appropriate, then the project proposal will progress to the Actual Content Stage.
 - This is where the actual changes will be decided on.
 - If you want to become involved in this stage, then please advise Daniel Chidgey at SA.

Hence, we ask that you Please fill out the form below indicating if you believe <u>That Any Change Is Appropriate</u>. In making the change proposal, we have listed 2 items in section 3.2.2 and 4 items in section 4.

J3.2.2:

- 1. Multi-Level Buildings: Because vibration amplification with height is common on multi-level buildings we are suggesting that some monitoring should be done in the buildings.
- 2. Soil Spike Usage: Currently AS2197 does not recommend the spoil spike so all we are doing is clarifying when it should or should not be used in accordance with current standard industry practice.

J4:

1. Remove the very old 1994 BS7385 data and replace with State Government Maximum Vibration Rules should apply.

- Every state now has their own blast vibration rules which is the same as for Australia, NZ and most other urbanised countries. The BS data is unsubstantiated and undated.
- 2. Define a 4-level system & change Human Comfort to Human Health.
 - We decided to change this when a blast almost caused a fatal accident, in addition there is tremendous residential anxiety before a strong blast.
- 3. Consider Historic and Multi-Level Buildings as well as Electronic and Data Storage systems.
 - Current 10 Terabyte mechanical disks have incredibly file tolerances and are easily damaged by just shouting.
- 4. Consider Blast Counts up to 800 blasts.
 - AS2187 only considers blast counts up to 40 whist it is common to do thousands of blasts. The effects of all blasts are compounded.

Thank you for reading this email – apologies if I have already sent these documents. Phil & Denisse Best.

Proposed Changes to Appendix J3 and J4 of AS2187 (Blast Vibration Monitoring).				
Monitoring	Proposed Change	Your	Further Details Provided here or below	
Section		Response		
		<u>(Yes, No,</u>		
		<u>Possibly,</u>		
		<u>Unsure)</u>		
J3.2.2	Some Multi-Level Building Vibration			
	Monitoring is Recommended if possible.			
	Recommended Transducer Mountings at			
	permanent monitoring sites is Concrete			
	Block or Epoxy methods to reduce			
	variability and maximise coupling.			
	Soil Spike Transducer Mounting method is			
	only recommended for Occasional Field			
	Measurements.			
J4	Remove reference to the old BS 7385 data.			
	Recommend that Local State and National			
	Maximum Vibration Rules should apply.			
	Define an improved 4-Level Blast Vibration			
	Damage Classification (includes changing			
	Human Comfort to Human Health).			
	Include consideration for Historic Buildings,			
	Multi-Level Buildings, Data Storage and			
	Other Electronic Devices.			
	Include consideration for high blast counts			
	up to 800+.			

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