

6 September 2022

**Minister Mick Gentleman**

Minister for Industrial Relations and Workplace Safety

By email: [gentleman@act.gov.au](mailto:gentleman@act.gov.au)

and

**The Commissioner – Ms Jacqueline Agius**

WorkSafe ACT

By email: [worksafe@worksafe.act.gov.au](mailto:worksafe@worksafe.act.gov.au)

**Request for Information: Changes to Silica Dust Requirements**

We appreciate the opportunity to provide further information relating to the changes to silica dust requirements that will affect the building and construction industry in the ACT.

We refer to our previous submissions made in relation to the proposed silica dust to be come into effect under the *Work Health and Safety Amendment Regulation 2022* (No 1) ('the WHS Amendment Regulation') from 17 October 2022.

The WHS Amendment Regulations, as previously advised, is fundamentally flawed and hasn't given any consideration to the feedback received from the building and construction industry previously. Simply providing a list of activities to be noted as 'exempt activities' should not be the **result** of the responses received by WorkSafe ACT, nor is it the most appropriate outcome for ACT Government or industry alike.

For these reasons, the WHS Amendment Regulations that were to apply broadly to the building and construction industry should be **repealed**. By doing so, ACT Government can then draft more appropriate Regulations to complement the feedback received from industry, without necessitating the requirement of a complex list of 'exemptions' to the legislation. Providing the list of 'exempt activities' is unnecessary and will ultimately lead to confusion in the interpretation of the legislative requirements – all things which could be avoided if the WHS Amendment Regulations was written in consultation with industry in the first instance.

MBA ACT acknowledges that whilst WorkSafe ACT has written to industry on Thursday 25 August 2022, it provided only a short period of time for industry, being **seven (7) working days** to provide responses to the Request for Information, noting that responses were to be provided '**before 5 September 2022**'. This is **not** sufficient time for industry to respond to the Request for Information, particularly from the Residential and Subcontractor sectors of the ACT building and construction industry.

**Background**

It is important to note that MBA ACT and its members support the prohibition of **uncontrolled** dry cutting of materials, particularly materials containing crystalline silica. This position remains unchanged.

There is no doubt that silica-related diseases are preventable, and therefore, eliminating exposure to respirable silica dust (RCS) in high risk work activities, such as in the engineered stone sector, is required to address the high risk of silicosis and/or other occupational lung diseases caused by exposure to RCS.

Master Builders Association of the ACT (MBA ACT) has consulted with its members over the last month to obtain feedback from members to further assist WorkSafe ACT, the Minister for Industrial Relations and Workplace Safety and the Workplace Safety and Industrial Relations (WSIR) Policy Team in better understanding the technological or incompatibility issues that arise with the use of water suppression when carrying out certain works to control the risk of exposure to RCS.

We echo the concerns raised in our letter dated 8 July 2022, in particular, the timeframes for industry to respond to the request for information, the practical implications of the use of the controls prescribed by the WHS Amendment Regulations, being 'water suppression plus one', and the financial, environmental, safety and engineering concerns that the use of water suppression can have when undertaking building and construction-related tasks and activities.

It is MBA ACT's position that WorkSafe ACT should recommend that the WHS Amendment Regulation to come into effect from 17 October 2022 should be **further delayed** until proper consideration can be given to all task/activities provided by way of feedback from industry. The Commissioner has undertaken that WorkSafe ACT will conduct independent assessments of each of the tasks/activities identified by industry. It is our opinion that one (1) month will not be sufficient time for these assessments to be completed prior to the implementation of the WHS Amendment Regulations.

It is our opinion that where industry stakeholders were properly consulted with in relation to the proposed Regulations prior to WHS Amendment Regulation being passed, it is likely that these issues would have been addressed promptly and the severity of the concerns could have been avoided, not to mention the further consultation and consideration of the issues by WorkSafe ACT.

#### **Proposed control measure of water suppression plus one – *reasonably practicable?***

It is noted that the MBA ACT 'ACT Construction Industry Safety Advisory Group' (ACISRG) formed a Silica Working Group have worked tirelessly with WorkSafe ACT and WSIR representatives to assist with the compilation of air monitoring results and the development of the Managing Silica Dust at Construction Sites Guidance Note. In particular, the information provided for consideration in the development of the matrix provided at Annexure B. It was noted that feedback had been previously provided by industry for consideration but has not been reflected correctly in either the Guidance Note and/or the Amended Regulations.

MBA ACT now provides the content at **Table A** for urgent consideration by WorkSafe ACT. This list is compiled from feedback received from Members, however, is not exhaustive of all possible

construction-related activities where water suppression can be detrimental to the building process.

MBA ACT encourages WorkSafe ACT to consider this Table in addition to all other responses received from industry during this consultation period.

Again, as mentioned in our letter dated 8 July 2022, WorkSafe ACT is a party to the discussions that occur at a national level, and as a signatory to the model laws, were encouraged to await the conclusion of the national consultation process, given the nature of the changes to be implemented. What is being proposed in the ACT may be reasonably practicable for the engineered stone sector, however, is not reasonably practicable for building and construction industry generally, especially when other more efficient control measures can be implemented to minimise or eliminate exposure to RCS.

MBA ACT notes that irrespective of the measures to be implemented, careful consideration must be given to ensure that tangible improvements to safety can be demonstrated.

#### **Practical reality of the WHS Amendment Regulations – member feedback**

Members of MBA ACT have expressed their concerns in relation to the practical reality of the WHS Amendment Regulations, specifically Regulation 418B (Uncontrolled dry cutting of material containing crystalline silica) and Regulation 418C (Effective control measures for cutting of material containing crystalline silica).

Concerns from members about prescribing how works are to be completed, hence, removing the choice to determine what is *reasonably practicable* to eliminate or minimise the risk of exposure to RCS, and consequently deviating from the Model WHS legislation relating to the management of hazards and risks through a hierarchy of control, was a reoccurring response.

#### **The use of water suppression – genuine risks and concerns of industry**

Members have not only provided their list of tasks/activities, but they have also provided their feedback in relation to the risks and concerns about the use of water suppression when undertaking those tasks. It is noted that water suppression is not only impracticable, but it can also actually create additional hazards. These risks/concerns are also noted in **Table A**.

These include, but are not limited to the following examples:

- Water damage to a working area and the management of water to suppress dust from material containing crystalline silica;
- Safety concerns for a person or persons working in a wet working environment, the increased risks of slips, trips and falls, etc.;
- Clean up and disposal of the slurry produced as a result of using water as a method to suppress silica dust becoming airborne;
- Air monitoring undertaken by members has shown that in some circumstances, the use of an appropriate dust extraction device was sufficient to minimise particles of crystalline silica dust becoming airborne, whereas the use of water in some circumstances actually increased the risk of those particles becoming airborne;

- The lack of information and/or education being made available to workers in various sectors of the ACT building and construction industry where these changes are going to have a significant impact on work practices.

### Recommendations

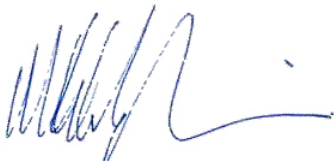
1. That the current WHS Amendment Regulation be amended to reflect a position which allows PCBU's to implement a hierarchy of controls based on a site based risk assessment. This approach should not contain a list of mandatory control measures.
2. That WorkSafe ACT should recommend that the WHS Amendment Regulation to come into effect from 17 October 2022 should be **further delayed** until proper consideration can be given to all task/activities provided by way of feedback from industry.

It would be prudent for WorkSafe ACT to consider making the request to repeal the WHS Amendment Regulations that may apply to building and construction-related tasks and activities immediately.

On behalf of industry, MBA ACT would be happy to discuss further with the Minister, WorkSafe ACT and/or WSIR in relation to any changes to the Regulations to complement the feedback received in relation to building and construction-related activities at a time convenient for all.

Please do not hesitate to contact the writer if you have any questions in relation to this letter.

Yours sincerely,



Chief Executive Officer  
Master Builders ACT

**TABLE A - Controlling Silica Dust with Water in Construction – List of Member feedback**

#	Equipment / Task	Is water standard for this activity? Yes/No	Can Water be used? (Yes / No)	Justification	Proposed Engineering and Work Practice Control Methods to reduce levels to > 0.05 mg/m3
1.	Handheld Power Saws cement cutting				
2.	Cutting, drilling, sanding, trimming composite stone bench tops on site				
3.	Handheld Grinders for Tasks Other Than Mortar Removal	No  No	No  No	<ul style="list-style-type: none"> <li>- Water Damage to tools will occur</li> <li>- Risk of water damage to handheld tools</li> <li>- Risk of water damage to finished product / area</li> <li>- Risk of electrocution - use of electrical power tools</li> <li>- Risk of strain - Manual Handling of Water containers for use with tool</li> </ul>	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust extraction/collection system.</li> <li>- Operate and maintain tools &amp; RPE in accordance with manufacturer's instructions.</li> <li>- RPE – APR &amp; PAPR</li> <li>- H-Class &amp; M-Class vacuums</li> </ul>
4.	Handheld Power Saws Used to Cut Fiber-Cement Board	No	No	Water Damage to tools will occur	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust</li> <li>- P2 mask worn by operator</li> </ul>
5.	Jackhammers or Handheld Powered Chipping Tools				
6.	Handheld and Stand-Mounted Drills				
7.	Horizontal Drilling ( Concrete Wall / Column)	Yes  No	Yes  No	<ul style="list-style-type: none"> <li>- Risk of water damage to handheld tools</li> <li>- Risk of water damage to finished product / area</li> <li>- Risk of electrocution - use of electrical power tools</li> <li>- Risk of strain - Manual Handling of Water containers for use with tool</li> </ul>	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust extraction/collection system.</li> <li>- Operate and maintain tool &amp; RPE in accordance with manufacturer's instructions.</li> <li>- RPE – APR &amp; PAPR</li> <li>- H-Class &amp; M-Class vacuums</li> </ul>
8.	Vertical Drilling (Concrete floors)	No	Yes	<ul style="list-style-type: none"> <li>- Risk of water damage to handheld tools</li> <li>- Risk of water damage to finished product / area</li> <li>- Risk of electrocution - use of electrical power tools</li> <li>- Risk of strain - Manual Handling of Water containers for use with tool</li> </ul>	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust</li> <li>- P2 mask worn by operator</li> <li>- Water</li> <li>- Tools equipped with commercially available dust extraction/collection system.</li> <li>- Operate and maintain tool &amp; RPE in accordance with manufacturer's instructions.</li> <li>- RPE – APR &amp; PAPR</li> <li>- H-Class &amp; M-Class vacuums</li> </ul>
9.	Overhead Drilling (Concrete Ceiling / Soffits)  Drilling and or cutting overhead	No	No	<ul style="list-style-type: none"> <li>- Risk of water damage to handheld tools</li> <li>- Risk of water damage to finished product / area</li> <li>- Risk of electrocution - use of electrical power tools</li> </ul>	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust</li> <li>- P2 mask worn by operator</li> <li>- Tools equipped with commercially available dust extraction/collection system.</li> </ul>

				<ul style="list-style-type: none"> <li>- Risk of strain - Manual Handling of Water containers for use with tool</li> <li>- If necessary, to use platform ladders due to room space restraints eg due to an occupied premises, water contrivutes to slip and fall from ladder (Applying the water suppression and collection of the spoil may prove difficult depending on the equipment and access) limitations</li> <li>- Electrical hazard due to water entering drill motor</li> <li>- Manual Handling, Additional water points, increased hoses connections on sites.</li> </ul>	<ul style="list-style-type: none"> <li>- Operate and maintain tool &amp; RPE in accordance with manufacturer's instructions.</li> <li>- RPE – APR &amp; PAPR</li> <li>- H-Class &amp; M-Class vacuums</li> </ul>
10.	Stationary Masonry Saws	Yes	Yes		<ul style="list-style-type: none"> <li>- Operate and maintain tool in accordance with manufacturer's instructions.</li> </ul>
11.	Handheld Grinders for Mortar Removal	No	No	<ul style="list-style-type: none"> <li>- Water Damage to tools will occur</li> <li>- Potential for electrocution if non battery tools used</li> <li>- Additional manual handling of water containers for use with tool</li> </ul>	<ul style="list-style-type: none"> <li>- P2 mask worn by operator</li> </ul>
12.	Walk-Behind Concrete Cutting Saws				–
13.	Drivable Saws				–
14.	Rig-Mounted Core Saws or Drills				–
15.	Dowel Drilling Rigs for Concrete				–
16.	Vehicle-Mounted Drilling Rigs for Rock and Concrete				–
17.	Walk-Behind Milling Machines and Floor Grinders				–
18.	Small Drivable Milling Machines (Less than Half Lane)				–
19.	Large Drivable Milling Machines (Half Lane and Larger)				–
20.	Crushing Machines				–
21.	Heavy Equipment and Utility Vehicles Used During Demolition Activities (Rock Hammer/Breaker)				–
22.	Heavy Equipment and Utility Vehicles Used for Grading and Excavating Tasks				–
23.	Concrete Spraying (Shotcrete)				–
24.	Demolition – Various Activities	No	No	<ul style="list-style-type: none"> <li>- Additional manual handling of water containers for use with tool</li> <li>- Water Damage to tools will occur</li> <li>- Potential for electrocution if non battery tools used</li> </ul>	<ul style="list-style-type: none"> <li>- P2 mask worn by operator</li> </ul>
25.	Hydrocut				–
26.	Floor leveller (grinding)				–

27.	Cutting Tiles / Stone	No	No	Water Damage to tools will occur	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust</li> <li>- P2 mask worn by operator</li> </ul>
28.	Mixing Cement & Mortar	Yes	Yes		<ul style="list-style-type: none"> <li>- P2 mask to be worn due to addition of dry mix</li> <li>- SDS &amp; manufacturer's instructions.</li> <li>- P2 mask worn by operator</li> </ul>
29.	Render Plastering				-
30.	Cutting Brick	Yes	Yes	<p>Due to the use of water when operating machine, it is not possible to use a vacuum system with wet product</p> <p>Water Damage to tools will occur</p>	<ul style="list-style-type: none"> <li>- Operate and maintain tool in accordance with manufacturer's instructions.</li> <li>- Tools equipped with commercially available dust</li> <li>- P2 mask worn by operator</li> </ul>
31.	Cutting Blocks	Yes	Yes	Due to the use of water when operating machine, it is not possible to use a vacuum system with wet product	- Operate and maintain tool in accordance with manufacturer's instructions.
32.	Cutting Pavers	Yes	Yes	Due to the use of water when operating machine, it is not possible to use a vacuum system with wet product	- Operate and maintain tool in accordance with manufacturer's instructions.
33.	Hebel Cutting				-
34.	Gyprock cutting				-
35.	Wall chasing	No	No	Water Damage to tools will occur	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust collection</li> <li>- P2 mask worn by operator</li> </ul>
36.	Core holes	Yes	Yes		-
37.	Vermiculite Spray				-
38.	Cutting Natural Stone				-
39.	Cutting Composite Stone				-
40.	Cleaning Scaffold	Yes	Yes		-
41.	Floor Sweeping	No	Yes & No	Dependent on job task and location	- P2 masks can be worn
42.	Stripping Scaffold	No	No		-
43.	Installation of door stops on carpet				-
44.	Cutting of fire doors				-
45.	Rock Anchors	No	No	Water Damage to tools will occur	<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust collection</li> <li>- P2 mask worn by operator</li> </ul>
46.	Cutting Concrete Speedwall	No	No		<ul style="list-style-type: none"> <li>- Tools equipped with commercially available dust collection</li> <li>- P2 mask worn by operator</li> </ul>
47.	Cutting works around critical electrical infrastructure		No	Critical electrical infrastructure cannot therefore be isolated (hospital)	Use other methods of dust capture. I.e. HEPA filters/ vacuum attachments
48.	Cutting over a tenanted area or around critical infrastructure		No	Water leaching through control joints/ peno's and entering other areas causing secondary risks i.e.	-

				ceiling collapse, property damage, infrastructure damage	
49.	Drilling works around electricity or critical infrastructure		No	Critical electrical infrastructure cannot therefore be isolated (hospital)	Safer to avoid the use of water and use other methods of dust capture. I.e. HEPA filters/ vacuum attachments
50.	Drilling with small hand tools		No	The tooling (hand tools) cannot be used around water or there aren't commercially available hand tools that allow water suppression	–
51.	Cutting and or drilling overhead (Anchors used in concrete slabs to support mechanical, electrical, and hydraulic services, suspended ceiling grids, bulkhead framing etc)		No	Wet cutting would be a nightmare for this type of work, think of how overhead drill holes may be made into a ceiling slab and those following other installations.	–
52.	Cutting and or drilling façade FC sheet products up on a building from scaffold, EWP's or Swinging Stage		No	Getting water to these work areas may be overly complicated or not feasible	Battery operated vacuums are more suitable to this work
53.	Drilling - anywhere water slurry would cause an environmental or pollution hazards		No	<ul style="list-style-type: none"> <li>- In general, wet slurry is a lot harder to contain and clean than dust.</li> <li>- Contaminated water would inevitably run off into the waterways</li> <li>- Wet cutting could also dramatically increase the water consumption onsite during construction, which depending on job location may be an issue (limited water resources, times of drought?)</li> <li>- Water means there is a potential for mould to spawn after the fact due to it seeping into pours materials (insulation, drywall, etc) and or poorly ventilated areas</li> </ul>	Utilising HEPA rated extraction attachments at time of drilling
54.	Cutting porcelain and or glossy tiles		No	Chips tiles to buggery Gloss tiles get very slippery (safety hazard)	Tried on a job in Forrest, had to move cutting site with an exclusion zone
55.	Drilling at heights on swinging stage		No	Spillage of concrete slurry onto passengers below, can get carried in the wind, spray over onto peoples windows, very costly to do minor clean ups	–
56.	Drilling - hanging items or shelving on un/painted block walls when finished floors or final wall finishes are down		No	Risk of damaging floors, walls etc	–
57.	Mandated use of water		No	<ul style="list-style-type: none"> <li>- Risk of impacting existing control measures such as dust extraction units, such as moisture from water suppression combined with dust and clogging dust extraction systems- (filter and internal components. The result is a good dust management system not operating and not capturing the dust. This would impact civil</li> </ul>	<ul style="list-style-type: none"> <li>- It would be better to manage the dust with good dust extraction vacuums without introducing the risk of water and electricity.</li> <li>- Other dust collection systems</li> </ul>



				<p>equipment such as rock drills, milling machines etc</p> <ul style="list-style-type: none"> <li>- Danger of using electrical equipment around water. We all know water and power tools don't mix.</li> <li>- Processes that require significant volumes of water could present significant site and environmental management concerning capture and disposal compared to other methods of capture and disposal i.e. dust collection systems.</li> </ul>	
58.	Crushing		No	<ul style="list-style-type: none"> <li>- the material being crushed can be very susceptible to water i.e. water can result in cohesive material mixed with the rock being crushed, blocking crushing/ processing equipment which then requires unblocking. Unblocking the equipment is required to be done by hand, increasing manual handling tasks, which already significantly impacts our industry.</li> </ul>	-
59.	Enforcement			<ul style="list-style-type: none"> <li>- Hard to police in some settings, such as indoor settings. Risk of outdoor operators being targeted as a result as we are more visible. Question around, will the application of the legislation control the highest risk setting.</li> </ul>	- allow PCBU's to control dust by means of either water, dust collection/ vacuums, isolation and PPE rather than mandating a control that introduces additional risk that the risk assessment process could have avoided
60.	Remedial waterproofing of balconies on class 1 & 2 buildings		No	<ul style="list-style-type: none"> <li>- Access through internal living spaces where no external access to water is available. Mud is generated adding to the mess. Unconfined mud then is traipsed through the inter spaces, dries and creates another hazard.</li> <li>- Mud is harder to manage (prevention of going down waste outlets)</li> <li>- Mud is impossible to clean out without more water, greater hazards created with having to use power</li> <li>- Water on stripped balconies is the absolute worst for effective waterproofing. - clean, dry surfaces with NO DUST in the pores of the concrete is a MUST for effective waterproofing.</li> <li>- Wet cutting / drilling, etc only delays what is already extraordinarily difficult to coordinate</li> </ul>	- Other dry control measures.

				<p>around rainfall (much of the reason why liquid membranes fail more in Canberra).</p> <ul style="list-style-type: none"> <li>- Adding water to a leaky balcony is dangerous, allowing more water in could collapse ceiling below, increasing the risk to the general public.</li> <li>- Allowing water entry to occupied units can cause electrical hazards that would not otherwise have been created. Risk to general public and workers increased.</li> </ul>	
61.	Remedial waterproofing of metal and tiled roofs on class 1 & 2 buildings (and others)		No	<ul style="list-style-type: none"> <li>- Increase of the pitch, increase the risk. Adding water to this would substantially increase the risks associated with these activities. Does anyone really want to push us in that direction?</li> </ul> <p>While you could do it on the ground, there are concrete roofs that need to be cut, drilled and grinded.</p>	–
62.	Drilling and cutting on uneven surfaces		No	<ul style="list-style-type: none"> <li>- Where slurry cannot be captured at point of operation, Slips due to uncontrolled slurry</li> <li>- Slurry will present a hazard to worker and others once dry if clean-up is not effective</li> </ul>	–
63.	Drilling into rendered or brick walls and wall tiles		No	<ul style="list-style-type: none"> <li>- Joinery units being installed and high quality finished surfaces including veneers, paint, fabrics, carpets, may get damaged, with adequate water/slurry protection being cost prohibitive</li> <li>- Vanity units and toilet partions may be damaged</li> </ul>	–
64.	Chasing electrical cables or pipes in rendered walls and slabs		No	<ul style="list-style-type: none"> <li>- Where slurry cannot be captured at point of operation, Slips due due to uncontrolled slurry</li> </ul>	–
65.	Rock Hammering - using a rock breaker fitted to an excavator to break rock and concrete	No	No	<ul style="list-style-type: none"> <li>- Most locations of rock hammering are difficult to access, and the requirement to establish water suppression equipment creates additional risks, including; <ul style="list-style-type: none"> <li>• Additional plant and equipment in the area of mobile plant operations (Congestion of the work area of a high-risk work practice)</li> <li>• Creating a slippery surface due to the presence of water creates an access issue for both plant and personnel. Noting that water reduces the coefficient of friction between two surfaces which can create</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Isolation of work area (already industry norm due to the noise produced)</li> <li>• Enclosed cabin for operators with air conditioning filters</li> <li>• Respiratory protection for any person within a defined area around the works</li> <li>• No works during windy conditions that could transport the dust</li> <li>• Where assessed as required, i.e., isolation cannot be established, implement water or vacuum controls</li> </ul>

				<p>significant risk to operations, i.e., steel tracked plant operating on sloping ground that would not be a risk without the presence of water on the surface</p> <ul style="list-style-type: none"> <li>- Environmental management of wastewater produced from the water suppression activity, i.e., capture, treatment and discharge, along with disposal of waste sludge.</li> </ul>	
66.	Rock Drilling for rock anchors and blasting operations	No	No	<ul style="list-style-type: none"> <li>- Rock anchoring can be completed in various locations, including locations of difficult access and in very poor ground conditions that can react disastrously to water, i.e.: <ul style="list-style-type: none"> <li>• Water leaching into fractures and seams in the rock mass and causing slip failure of a slope, resulting in rock fall potentially impacting personnel and plant below the works or affecting personnel carrying out the works.</li> <li>• Water running down a slope, washing out alluvial material, and destabilising the slope resulting in rock fall crushing workers or the below public.</li> </ul> </li> <li>- Water blocking dust vacuum/extraction systems on drilling rigs, thus rendering a very good current control redundant</li> <li>- Access issues associated with the supply of water suppression equipment to the restricted works area, including <ul style="list-style-type: none"> <li>• Additional equipment needed to be mobilised on hard-to-access terrain, e.g., slope stabilisation project, drill and blast work area.</li> <li>• Additional storage space for equipment in restricted areas, i.e., road verges of lane closures that offer very limited room initial for storage and safe access</li> </ul> </li> <li>- Water impacting the integrity of the blast hole and blasting operation. The presence of water in blast holes prevent the use of emulsion explosive that need to be replaced with package explosives which have increased operational risk, including logistics and storage of dangerous package explosives and the misfire risk resulting in unexploded package explosive remaining in blasted rock that is not</li> </ul>	<ul style="list-style-type: none"> <li>• Use of dust vacuums systems on drilling equipment to contain dust</li> <li>• Operators to stay within cabins protected by air conditioner filters</li> <li>• Isolation of work area (already industry norm due to the noise produced)</li> <li>• Close proximity workers on small difficult access rigs to wear respiratory protection</li> <li>• Implement water control where isolation cannot be established, and dust extraction units cannot be fitted, i.e., drilling rigs installed on slopes through ropes.</li> </ul>

				a significant risk when using emulsion type explosives.	
67.	Rock Crushing Operations	No	No	<ul style="list-style-type: none"> <li>- Water can seriously impact the operation of a crushing plant as the water binds with cohesive material and blocks crusher jaws, and prevents them from operating. The crusher then needs to be cleared with 90% of the time this to be carried out by hand and hand tools. This significantly increases the manual handling risks to the task of crushing rocks, which are difficult to access.</li> <li>- Water infiltrates the crushing equipment's electrical componentry, causing operational faults and potential electrical contact risks for workers</li> <li>- Water creates environmental issues, including wastewater containment and disposal</li> <li>- Water supply creating an operational restriction during dry climate conditions, i.e., drought, understanding that during the last dry period, water supply to the industry was becoming critically low</li> </ul>	<ul style="list-style-type: none"> <li>• Isolation of work area (already industry norm due to the noise produced).</li> <li>• Operators of plant locating crushers to stay within cabins protected by air conditioner filters.</li> <li>• Water suppression on stockpiling operations</li> </ul>
68.	Rock and Soil Screening Operations.	No	No	<ul style="list-style-type: none"> <li>- Water can seriously impact a material screening operation as water binds with cohesive material and prevents it from being separated from larger particles, making the task unworkable, and therefore in a significant number of locations, prevents materials from being beneficially reused, thus would need to be managed as waste and disposed of accordingly.</li> </ul>	<ul style="list-style-type: none"> <li>• Isolation of work area (already industry norm due to the noise produced).</li> <li>• Operators of plant loading screens to stay within cabins protected by air conditioner filters.</li> </ul>
69.	Ripping rock during earthworks operations	No	No	<ul style="list-style-type: none"> <li>- The application of water to ripping operations can be very difficult due to access for water suppression equipment, i.e., water carts. Ripping is typically performed by steel-tracked bulldozers that create a surface that is inaccessible to wheel equipment.</li> <li>- In some situations where excavators perform ripping, very limited access is available, and requiring water suppression equipment will further restrict safe working room, available room and access for plant and personnel.</li> <li>- Water suppression activities can also result in the need to have ground personnel close to mobile plant operations, thus significantly</li> </ul>	<ul style="list-style-type: none"> <li>• Isolation of work area (already industry norm due to plant operations).</li> <li>• Operators of mobile plant to stay within cabins protected by air conditioner filters.</li> <li>• Use water in the case where isolation cannot be achieved, i.e., adjacent to public areas</li> </ul>

				increasing operational risks of crush, impact and noise relating health risks	
70.	Concrete Repair works on time critical repairs, i.e., bridge works to remove and replace damaged concrete and/or joints.	At times	No	<ul style="list-style-type: none"> <li>- The use of water in some situations can create time-critical issues for repair works, which need a dry substrate for binding materials to ensure works are correctly completed. If water is used, drying is required that can only be performed by use of artificial heating, i.e., flame heaters that increase task risks, including working with high artificial temperatures and highly combustible materials.</li> <li>- Time-critical applications include road closures to repair bridge components such as joints and barriers.</li> <li>- The introduction of water increases the duration of works, resulting in additional shifts to complete the works as drying time is required between cutting and Repair, increasing traffic control requirements and the risk of extended traffic control arrangements.</li> </ul>	<ul style="list-style-type: none"> <li>- Use dust vacuums on cutting tools &amp; drills</li> <li>- Operators to wear respiratory protection</li> <li>- Use water suppression where it is assessed safe, considering overall task safety</li> </ul>
71.	Removal of concrete elements from road works, i.e., kerbs and footpath	At times	No	<ul style="list-style-type: none"> <li>- Water suppression equipment creates additional storage and access issues to complete the works, and working in confined areas significantly increases task risks, including manual handling and traffic control arrangements.</li> </ul>	<ul style="list-style-type: none"> <li>• Use dust vacuums on cutting tools &amp; drills</li> <li>• Operators to wear respiratory protection</li> </ul>
72.	Minor drilling works for hold down bolts, fittings etc	No	No	<ul style="list-style-type: none"> <li>- Water Suppression creates operation issues with hand tools, including electrical hazards (Electricity and Water), even with battery tools.</li> <li>- Replacing electric tools with air tools in some applications is good. Still, in many cases introduces significant greater task risk, including operation noise and the management of working with high-pressure hoses, connections and pressure vessels.</li> <li>- Water can significantly impact the work area, i.e., in an indoor setting, it can damage finishes and furnishings that would require additional work to repair, or in some cases, if water residue is left can result in mould development, creating additional health hazards for occupiers of indoor areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Use dust vacuums on cutting tools &amp; drills</li> <li>• Operators to wear respiratory protection</li> </ul>
73.	<p>– <b>General Comments</b> - Overall, the mandating of water will remove the ability of workers to assess and control risk appropriately for the specific task and location and lead to additional operational risks that can be managed, but creates an operational burden on workers that then has the potential to fail, as the human habitat will be the path of least resistance. Therefore, instead of legislation control working to protect, it will be disregarded in some applications as it simply creates issues, rather than solves them.</p>				

	<p>– We have aimed to be succinct with our information, as some risks presented by the use of water would need additional words and sketches. If you believe it worthwhile, we are happy to come the discuss any of this with you to provide a comprehensive understanding of the situations.</p>
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