

Submission to the Asbestos Safety and Eradication Agency Asbestos-Cement Water and Sewer Pipe Management Guidelines Draft for public consultation

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Introduction

Local Government NSW (LGNSW) is the peak body for local government in NSW, representing NSW general purpose councils and related entities. LGNSW facilitates the development of an effective community-based system of local government in the State.

The NSW Water Directorate represents all local water utilities in New South Wales. The Water Directorate aim is to provide focused technical information to its members, an independent source of advice to councils on water and sewerage operations, promoting a more efficient operation of Local Government water and sewerage infrastructure; providing networking opportunities for water and sewerage engineers to share knowledge and improve communication within the industry.

LGNSW and the Water Directorate work closely together on policy issues that affect councils and local water utilities.

Opening

Local Government plays a critical role in reducing the risks posed by asbestos. Councils work together with the State Government, Federal Government and the wider community to address the legacy of asbestos in building materials and land contaminated with asbestos, as well as addressing naturally occurring asbestos.

The Asbestos Safety and Eradication Agency have released the draft Asbestos-Cement (AC) Water and Sewer Pipe Management Guidelines for public comment. These guidelines provide an overview of how ageing asbestos-cement (AC) water and sewer pipes may be maintained and managed in accordance with Australian environment and work health and safety (WHS) laws.

The guidelines are designed to help water authorities and other people engaged in, or responsible for, maintaining and managing AC water and sewer pipes understand how to comply with the relevant laws.

Background

Exposure to asbestos fibres can cause serious health risks. The risks from asbestos come from inhaling the fibres. Asbestos is composed of long silky fibres that contain hundreds of thousands of smaller fibres. These fibres can be subdivided further into microscopic filaments that can float in the air for several hours.

Asbestos fibres can pose a risk to health if airborne and breathed in as the fibres may penetrate body tissue and cause disabling and fatal diseases, most likely after prolonged exposure. Asbestos that is tightly bound with another material, such as Portland cement (as with AC pipes) is considered non-friable and will only release fibres if disturbed; such as by being damaged, sanded, cut, broken, drilled, machined, etc. Workers may become exposed to asbestos fibres unless proper precautions are taken during the handling, maintenance or repair of AC pipes.

AC pipes contain chrysotile-cement made by adding 10% to 15% chrysotile fibre to a mixture of Portland cement and water. It has high tensile strength and excellent compression resistance. It can withstand alkalis, corrosion, heat, electrical conductivity and harsh weather. The reinforcing properties of chrysotile fibre greatly increase the durability of, and the ability to manufacture thinner and lighter pipes.

In Australia, AC pipes manufactured until the mid-1980s consisted mainly of chrysotile from Canada, blended with amosite from Africa and crocidolite from Australia. The asbestos content varied from 12% for non-pressure pipes, to 15% for pressure pipes, with the blend varying to meet different specifications.

Consultation Process

In 2018, the Asbestos Safety and Eradication Agency released a report - *Case studies of asbestos water pipe management practices*. The report examined six cases of rehabilitating water and sewer pipes containing asbestos in Victoria, Queensland and Western Australia and identified best practice for safe and effective management and removal.

The report recommended that a clear, nationally consistent approach to managing asbestos cement water pipes is needed for cost-effectively managing approximately 40,000 km of water mains pipes and 5,000 km of sewer pipes containing asbestos cement across Australia.

In response to that recommendation, the Agency developed the draft Asbestos-Cement (AC) Water and Sewer Pipe Management Guidelines, in collaboration with a working group representing industry, union and government officials. The NSW Water Directorate and LGNSW have participated in the consultation process that has led to the production of the guide and have provided technical and policy input as required.

To facilitate a whole of NSW local government sector response, LGNSW and the NSW Water Directorate co-hosted an online forum of utilities and councils to discuss the guide and provide responses to the consultation questions. Councils were also invited to supply supplemental information by email following the forum. The forum took place on the 23rd July and included the following councils and council organisations.

Ballina Shire Council	Federation Council	Port Macquarie-Hastings Council
Bland Shire Council	Goldenfields Water County Council	Queanbeyan-Palerang Regional Council
Blayney Shire Council	Griffith City Council	Shellharbour City Council
Blue Mountains City Council	Griffith City Council	Singleton Shire Council
Camden Council	Kempsey Shire Council	Tenterfield Shire Council

Campbelltown	Liverpool City Council	Port Macquarie-Hastings Council
Central Coast Council	MidCoast Council	Tweed Shire council
City of Ryde	Dubbo Regional Council	Walgett Shire Council
Eurobodalla Shire Council	NetWaste	Warren Shire Council
Wingecarribee Shire Council	Yass Valley Council	

Recommendations

Consultation Question	Recommendations
<p>1. Are there additional asbestos-cement maintenance and management techniques that should be included in the guidelines? Or, alternatively, are there any that should be excluded from the guidelines?</p>	<ul style="list-style-type: none"> • Guidance is also needed on the temporary storage of waste pipes and associated waste, particularly after hours. • Standardised safe operating procedure (SOP) from the EPA for out of hours storage as that is when there is the most risk to the public – i.e. a standard template for what to do with an after-hours temporary storage document with risk hazard and control ratings. • Guidance is needed on how to measure and communicate water quality and asbestos risks. Councils would like to see a clear statement about any risks associated with asbestos suspended within water delivered to customers. • Guidance on how decommissioned pipes on council owned or managed land can be identified and managed. • Guidance for owners of pipes on how to record and communicate the existence of the pipes to others. • Guidance on unexpected finds and exposure risks due to undocumented and decommissioned pipes. • Where asbestos contaminates swimming pools (e.g.: as a consequence of cleaning asbestos roofs with high pressure hoses) what are the risk? How should asbestos suspended in water be measured and assessed (eg: fibres/litre)? • Guidance on the best way to assess and manage blockages in asbestos pipes. • Direction that the legacy asbestos should remain the responsibility of the utility until the asbestos has been removed and disposed of regardless of who the landowner or land manager is. • A complete process for emergency repair and maintenance should be developed

	<ul style="list-style-type: none"> • For blocked pipes, the alternative to high pressure jetting a blockage is rodding however the industry moved away from this due to the danger to workers and injuries sustained. Rodding is not safer physically for workers and can cause damage to asbestos pipes regardless, so we need to determine the best approach and have a consistent approach that all workers can follow. • It may also be useful to include areas where occupational hygienists can/should provide assistance and how they may do so when it comes to removal (i.e. At what stage should occupational hygienists be engaged and for what purpose).
<p>2. In which circumstances is it appropriate to use pipe bursting and pipe reaming methods for managing asbestos-cement water and sewer pipes? When using these methods is it possible to ensure that all asbestos-cement is removed from the ground during the clean up? How can the risks of future contamination be managed?</p>	<ul style="list-style-type: none"> • Pipes should not be burst with waste left in-situ. Pipe bursting can increase health risk to future generations if we allow pipe bursting of either water or sewer pipes. • Guidance on the legal implications of bursting pipes and leaving the waste in-situ. • Should legacy asbestos waste be added to the contaminated lands register(s). • Should registers be created to keep track of where pipe bursting has previously been undertaken? • Many council state that pipe bursting/reaming techniques should never be used for AC pipe replacements. If for example the same alignment is required, then the AC pipe should be removed during construction. • Many councils state that when pipes are burst they essentially convert a stable bonded material into a friable material. • The management of any areas where this has been undertaken previously on council owned or managed land is often unknown.
<p>3. Should the guidelines include more detail on the requirements to consult: > other duty holders in order to carry out the work safely under WHS laws, > councils, consumers and affected members of the public? If so, please advise what type of information you</p>	<ul style="list-style-type: none"> • Many councils believe that this is already covered in the code of practice on how to safely remove asbestos. Should this be included in the guide? Perhaps more guidance on how this guide relates to the codes of practice and other industry standards and when to use each document would be useful. • The guide should also include advice on whether notifications are required for quantities of asbestos less than 10sqm or 100kg. Guidance could also be provided for councils in how to regulate incidents involving small amounts of asbestos pipes should they be reported to councils. • Councils use licenced asbestos contractors or have their own asbestos removal license where the exposed surface area exceeds 10sq.m.

would like to see included.	
<p>4. How should disused asbestos-cement water and sewer pipe be managed? Can it be adequately managed in situ?</p>	<ul style="list-style-type: none"> • Management of this issue should be context based as for example metro/regional/rural councils often have different situations where pipes are located, different budgets, and the level of risk is quite varied. • Water pipes are typically 600mm deep and so it is likely that they will be disturbed in the future. However, sewers are typically 1-4m deep and the risk may be lower. • Guidance is required on what is the best practice for pipes left in-situ (i.e. filling vs cap and leave empty). • Are there a required approval process for leaving pipes in situ, if so what is it? • Location of in-situ management is important to determine what the future land use might be and what changes to land use might occur. • When undertaking removal works of substantial lengths, the cost of waste is a significant part of the total cost. How this may impact on achieving best practice should be part of any new guidelines. <p>Consideration should also be given to the process of recording underground asbestos pipes and how this can consistently be applied across all owners, including use of GIS and what that would mean. There is discussion of underground legacy assets in Dial Before You Dig, however it would be difficult as the location of many underground asbestos pipes is unknown</p>
<p>5. Should guidance on temporary storage and disposal of asbestos waste be added?</p>	<ul style="list-style-type: none"> • More guidance is needed on the storage, management and approvals required for temporary storage of asbestos waste (e.g.: use of asbestos skip bins at council facilities). • Councils think that temporary storage of AC waste is acceptable and low risk with good procedures in place. • More guidance needed on processes that include non-invasive techniques such as high-pressure water and liquification and vacuum extraction for trench/pit/excavation including transport, storage and disposal of asbestos waste. • Guides for temporary storage of asbestos should take account of the different contexts for the production of asbestos waste such as from emergencies. • Guidance should also include temporary storage requirements for LGA's that do not have a licensed asbestos disposal facility. • There are a number of country councils that are a long distance from a licensed asbestos disposal facility, the ability for them to have a temporary storage process in place would have more financial benefit and still ensure that all asbestos containing material ended up at a licensed asbestos disposal facility.

	<ul style="list-style-type: none"> • These could also be incorporated into the guide for storage and disposal of waste including duration it can be stored for, maximum amounts potentially per jurisdiction if required as an appendix. • Roles and responsibilities of organisations and persons involved in this element of the process is also important.
<p>6. Is there further practical guidance that should be included in the guidelines?</p>	<ul style="list-style-type: none"> • Safe systems and processes and procedures for work involving asbestos and pipes. • Additional practical details based on specific pipe maintenance and removal requirements. • Better procedural text of pipe cutting methods. • If the guideline is to be specific for engineers and operators to follow then it needs to provide more clarification on specific issues. • Emergency breakdowns are a key element of pipe management and an area where most asset owners will find themselves in a position of having to repair/remove an AC pipe. There should be a specific section covering emergencies and guidance on what may or may not be acceptable in these circumstances (i.e. a licenced removalist will not be on call to remove ACM at 3am in the morning) • Asbestos awareness training and what this specifically should include. Even though there is a training package, following council discussions with their workers, SafeWork NSW and training providers, there is still some confusion as to what awareness training will allow you to do. Many councils operate on a process that awareness will allow workers to undertake limited work in relation to ACM where specialised knowledge/licencing is not required. This may be relevant to this guide in situations where a worker removes a collar that may contain ACM and is treated as such regardless. A clear and consistent approach here would be beneficial.
<p>7. Are the guidelines user-friendly in terms of the language, layout and format? Or is there a better way to communicate a nationally consistent approach to managing asbestos-cement water and sewer pipes?</p>	<ul style="list-style-type: none"> • The layout of the document could be more user friendly. • Either this guide or other resources need to be developed that also focus should be on practical guidance. • This guide or other resources could give more specific context or case study examples on specific examples where asbestos pipes could be encountered , and how those specific situations should be or were managed. • The bullet pointing by numbers does not make easy reading and would be better formatted consistently with other practical guidelines available (e.g.: Codes of Practice etc.) into relevant sections with quick links through subheadings to allow users to jump to relevant sections. • Where documents are to be referred to such as NSW Water Directorate cutting guidelines, we need a consistent

	<p>approach and clarification that what is covered in that document is considered the acceptable process for the work nationally. If that is not the case, then we need to confirm what is acceptable.</p> <ul style="list-style-type: none">• Water directorate, councils and LGNSW are available to review communications material, language etc if needed by ASEA.
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Conclusion

These guidelines provide a valuable contribution to setting agreed industry and government principles. Moving toward shared and consistent principles will lead to better outcomes for asbestos pipe management and regulation. However, councils note that more detailed and specific practical guidance would be of great benefit.

LGNSW, the Water Directorate and councils welcome the opportunity to assist ASEA in developing best practice guidelines for asbestos pipe maintenance and removal. The Water Directorate and councils would welcome the opportunity to work further with ASEA on this very important issue.