

NZDAA – Asbestos Sector Review



PREPARED FOR:

The New Zealand Demolition
and Asbestos Association

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NZDAA Introduction

“He aha te mea nui
o tenei ao?

He tangata, he
tangata, he tangata”

The New Zealand asbestos industry comprises operators that engage in asbestos surveying and removal and the support services that accompany these activities.

The New Zealand Demolition and Asbestos Association (NZDAA) commissioned this report for those who work within the industry, those who commission asbestos work, and who regulate our industry.

Its intention (further expanded in the ToR and Methodology section) is to identify factors, institutions, and policies that could enhance or inhibit the growth prospects of the asbestos industry, and worker and community safety.

Currently, New Zealand’s asbestos industry has high levels of fragmentation and cumbersome governance arrangements, increasing operating costs in conjunction with complicated and sometimes conflicting standards.

The popularity of temporary work and forms of flexible employment contributes to more precarious work environments since health and safety laws may not apply.

While some may find parts of this report confronting – it represents a fair, unbiased, and transparent assessment of the overall health and safety performance of the industry.

This report should be viewed as an opportunity for all decision-makers to strengthen health and safety, employment opportunities, and productivity. Addressing these challenges must be multifaceted, with all stakeholders, without introducing additional burden, to further confuse or make matters worse.

Since first donning an asbestos suit and mask many years ago, I have worked with many remarkable people and businesses all over New Zealand. I know many strive to do good for their workers, clients, and their communities, while remaining profitable.

Clearing some of the barriers to these, as outlined within this report, will help make that a reality.

Helina Stil
President

New Zealand Demolition and Asbestos Association

Executive Summary

The situation is improving but there is a high degree of inconsistency in standards and gaps in the system.

This review has identified significant positive changes that have occurred in awareness of asbestos as a major health and safety issue in New Zealand over the past six years. Leading industry players in the removal sector are now seeking to be aligned with international best practice and are operating in an ethical and sustainable manner with regard to their workforce and risks to others.

System artefacts set out in Regulations and WorkSafe New Zealand’s Approved Code of Practice (ACOP), such as certified safety management systems, asbestos management plans (AMPs), Asbestos Removal Control Plans (ARCP) and licenced participants all have the potential to make a difference. The extent of that difference in practice is down to the quality and use of the various processes and how standards are enforced through supply chains and by the regulator. This picture is highly variable.

Progress with regard to building owners and those responsible for managing the in-situ risk as well as exposure to contractors is also inconsistent, and inadvertent exposure events continue to occur

either due to a lack of information or a failure to pass this on to the right people, at the right time, and in the right way.

Other than for those managing large property portfolios (including some in the public sector who have risen to the challenge), asbestos awareness amongst tradespeople, property managers, procurement teams and others responsible for engaging contractors to perform work is believed to be generally low.

There is no objective measure of how well (or poorly) asbestos is currently managed, given the long latent period between exposure and disease. The absence of a database of exposure monitoring results within or external to enclosures means that controls effectiveness is not systematically verified.

WorkSafe NZ have recently revised their outcome measure for their asbestos priority programme to reflect a shift from actual harm to exposure to the hazard.¹ Whilst this is welcome, there appears to be little understanding as to how this measure will be baselined and progress measured, given that they have no obligation to measure such exposures and no mechanism to record or report them in any systematic manner. The use of surveys is considered a weak approach, given the low level of awareness of when exposure is occurring.

Figure 1: WorkSafe NZ Statement of Intent 2021-2025

OUTCOME INDICATOR 1.2 – FEWER PEOPLE ARE EXPOSED TO CARCINOGENS THROUGH THEIR WORK

WHAT WE MEASURE	PROGRESS AGAINST BASELINE		BENCHMARK OR DIRECTION OF TRAVEL
Proportion of workers exposed to carcinogens classified by the International Agency for Research on Cancer as confirmed (Class 1) or probable (Class 2A) human carcinogens ¹⁴	Carcinogens Survey Workers with high or medium exposure to any carcinogen Workers with any exposure to asbestos	Baseline (2021) Survey results are being re-weighted to be representative of the workforce. Baseline data will be reported in Annual Report 2022	Proportion of workers with high or medium exposure to any carcinogen trends down Proportion of workers with any exposure to asbestos trends down

¹ <https://www.worksafe.govt.nz/about-us/corporate-publications/statement-of-intent/te-tauaki-whakamaunga-atu/>

The only official data is the number of notifications to WorkSafe NZ where the 0.2f/ml level is exceeded outside an enclosure or there is a notifiable asbestos event.² In our view this figure (approximately one per week) is likely to be a gross under-estimate of the true picture. Six regions reported less than 5 events in total each between April 2016 and August 2021.³

WorkSafe NZ has identified asbestos as one of the priorities under its occupational health programme as a Class 1 Carcinogen causing an estimated 250-300 deaths per year (based on historic exposure). This report should therefore help WorkSafe NZ to achieve their objectives of:

- Improving our understanding of work-related health risks and harms, including where we can focus our efforts to make the biggest difference;
- Building work-related health capacity and capability in WorkSafe and the wider system;
- Using a range of interventions to support businesses and organisations to address work-related health risks and to promote good work design; and
- Working with and through others across the wider system to raise the profile and priority of work-related health.

As the regulator, the work of WorkSafe NZ has increased, with over 10,000 asbestos assessments carried out over six years. It is also somewhat patchy and uncoordinated. Licensing under the Health and Safety at Work (Asbestos) Regulations 2016 (which we refer to as 'the Regs') has improved the standards for those subject to it. Given its policy to not have inspectors enter enclosures, however, there appears to be more of a focus on documentary evidence (work as imagined) and less verification of practice (work as done). Despite this, there has been a significant level of enforcement activity with around 2,000 enforcement notices issued in the past six years.⁴ Prosecution numbers

and fine levels however are very low (especially under the Regs which have maximum levels of between \$2-50k) and hence do not always act as a significant deterrent.

Key parts of the sector, such as those undertaking surveys or clearances for Class B work (which comprises the majority of notified jobs) are not licensed or accredited, and hence both largely invisible to the regulator and hard for clients to assess.

There are also parts of the wider asbestos ecosystem that appear to be operating with little oversight as to their practices and standards, such as training and equipment suppliers, medical practitioners providing asbestos medical examinations, and in the transport of asbestos waste.

From an overall policy perspective, New Zealand lacks a clear strategy towards eradication, unlike Australia or the Netherlands. No agency is tasked with public education and there is still confusion over roles and responsibilities for public health related asbestos issues-such as after a fire involving Asbestos Containing Materials (ACM) or DIY water blasting an asbestos cement roof.

High rates of labour turnover in the removal sector also create serious challenges. The cost of entry is high, with mandatory training, PPE and medical examinations. With no guarantee that workers entering the industry will stay, however, there is strong pressure to minimise these costs in a way that may lead to 'tick the box' compliance rather than delivering competent and safe workers. We heard from a number of people, including trainers, that they were dissatisfied with the current training regime. There is limited oversight of New Zealand Qualifications Authority (NZQA) - approved training providers. Class B (US 29765) and A (US29766) worker courses can be completed in two consecutive days, including online through reciprocal arrangements with Australia. A review of the current suite of Unit Standards has just been announced.

² Airborne asbestos fibre is measured in respirable fibres per millilitre of air (f/mL) in the workplace and in fibres per litre of air (f/L) or fibres per cubic metre (f/m³) for environmental exposure.

³ WorkSafe NZ OIA response.

⁴ See Appendix 2.

The medical examination system is inefficient, with records held by employers rather than workers or on a central database. This makes them of limited value for epidemiological purposes and possibly also for individual health surveillance. The former asbestos medical panel no longer exists; the Asbestos Exposure Register is an underutilised resource; the annual reports no longer provide a picture of current state.

There are aspects of the Regs and associated ACOP and guidance that those to whom we have spoken found to be inconsistent, difficult to interpret, or unhelpful. There is currently no structured industry forum at which such issues can be raised, discussed and resolved. Many people with whom we spoke referred to interpretations given by individual inspectors but which are not documented or officially endorsed.

A review by WorkSafe New Zealand of the ACOP by WorkSafe has been discussed for several years, and they are now indicating that this will start in late in 2022 with the establishment of an Expert Working Group and be completed by the end of 2023. This should provide an opportunity for a more coherent and consistent approach. Current suggestions are that the single ACOP be reissued (downgraded) as interpretive guidance with eight different guides on discrete topic areas.⁵ The need to target specific audiences with relevant guidance, rather than an omnibus approach, is a positive move.

One vitally important area that this review struggled to gain insight into is the worker perspective. Much of the front-line workforce in the asbestos industry is comprised of vulnerable workers. There are no unions, and very few effective health and safety representatives. We strongly recommend that a further project – perhaps sponsored by WorkSafe – looks into the experience of those hard-to-reach groups such as labour hire, new migrants, Māori and Pasifika, etc.

Further research could usefully look at:

- wider issues around the prevalence and condition of ACMs in the built environment in order to gauge future needs.
- the impact of changes in the Resource Management Act (RMA) to allow more intensive development in certain areas and hence more development of brownfield land,
- balancing waste minimisation and reuse with safety,
- the impact on the waste industry of growing demand for disposal of contaminated soils, and
- the need for better regulation of waste transport and disposal.

We make a number of recommendations for the Ministry of Business, Innovation and Employment (MBIE), WorkSafe NZ, NZQA and other system owners as well as for New Zealand Demolition and Asbestos Association (NZDAA) and Faculty of Asbestos Management Australia and New Zealand (FAMANZ) as the key bodies representing many of those active in the sector.

We also recommend the establishment of an industry leadership group that can monitor the implementation of these recommendations and drive continuous improvement in sector performance. This will build on the model established in other sectors (such as forestry) and help maintain momentum for change.

We would like to thank all of those who provided their time, insights and information to support this review. In particular we acknowledge the staff of WorkSafe NZ who undertook detailed analysis of their own data to provide better insights into their experience of working with the asbestos industry.

⁵ <https://www.asbestossafety.gov.au/what-we-do/national-strategic-plan>

<https://www.asbestos.com/news/2016/09/12/netherlands-bans-asbestos-roofs/>

⁶ Source: meeting with WorkSafe July 2022.

Recommendations

- 1 Establish an Asbestos Industry Forum between WorkSafe NZ and representatives of all key parts of the sector to regularly discuss and review standards, interpretation, current issues and new developments. Such a forum should operate in a transparent manner with published minutes and determinations.
- 2 MBIE works with the Ministry for the Environment, the Department of Internal Affairs, Local Government New Zealand, Health NZ, and other players to consider and report to Ministers on the benefits of establishing a single lead agency (modelled on the Australian Asbestos Safety and Eradication Agency) to provide a focal point for all asbestos policy and advocacy matters.
- 3 MBIE provide advice to Ministers that New Zealand should formally ratify the International Labour Organization's Convention 162 – Asbestos Convention, 1986 (No. 162) – and modify its regulatory standards to at least achieve those set out in it (while also acknowledging that it is now 35 years old and may need updating).
- 4 WorkSafe NZ and industry participants (Property Council, Local Authorities, Government Clients, DHBs, Real Estate Institute, Master Builders, Certified Builders, Association of Consulting and Engineering NZ and others) undertake a coordinated awareness campaign to remind building owners of the need to have (and review) an AMP based on reliable survey information as to the presence and risks associated with any Asbestos Containing Materials (ACMs) present.
- 5 WorkSafe NZ, Te Pūkenga, the Construction and Infrastructure Workforce Development Council (Waihanga Ara Rau), SiteSafe and Construction Health and Safety New Zealand (CHASNZ) consider the need for asbestos awareness training and competence assessment to be an essential element in the minimum entry requirements for all those in construction-related trades. This training should be incorporated into a Unit Standard to ensure consistency of scope. (Note: a review of the Asbestos Unit Standards is about to commence in September 2022.)
- 6 FAMANZ, in conjunction with Health and Safety Association of New Zealand (HASANZ), NZDAA and WorkSafe NZ, explore the possibility of establishing a graduated accreditation scheme for asbestos surveyors to provide a quality mark that prospective clients can use to select a competent surveyor. Any such scheme should include requirements for continual professional development (CPD) and have a formalised complaints process.⁷
- 7 WorkSafe NZ undertakes a targeted inspection initiative as part of its asbestos programme to review the quality, maintenance and application of AMPs.
- 8 NZDAA-licensed removalists provide anonymous feedback for a set period on the quality and relevance of refurbishment and demolition surveys provided at the time of tendering, to inform future engagement with clients and surveyors.
- 9 WorkSafe NZ publishes a clear timeline and engagement process for the revision of the Asbestos ACOP, recognising the need for significant changes to the content and format, but not reducing its status to guidance. (Note this is scheduled to start in November 2022.)
- 10 WorkSafe NZ includes details of non-standard licence conditions on the Asbestos Licence Register and requires licensees to provide a full copy of their current licence as part of the ARCP.

⁷ This could be modelled on the Registered Environmental Assessment Practitioner scheme in Australia and NZ <https://www.cenvp.org> and/or be linked to the HASANZ Register.

- 11 NZDAA establishes its own arm's-length professional standards framework for those companies working in the asbestos removal sector so that there is a quality mark and complaints process, to provide greater clarity and protection for prospective clients and to encourage professionalism in the industry.
- 12 WorkSafe NZ engages with NZQA and private training establishments to set an expectation of the minimum competence and experience level required of those delivering Class A, B and Supervisor asbestos training.
- 13 WorkSafe NZ, in conjunction with all industry players, revise the ACOP to include specific requirements for initial and refresher training, practical competence assessment, and the maintenance of training records. In the medium-term, discussions should be held with CHASNZ about including asbestos related skills in the Construct Safe process.
- 14 WorkSafe NZ changes the criteria for consideration of suitability to be a named Supervisor from one based on days worked to an objective, competency-based assessment.
- 15 WorkSafe NZ amends the requirement in the ACOP for A Class work to include external monitoring of removal work practices by the licensed assessor. This could include: peer review of the ARCP to validate the methodology and scope; witness the smoke test; periodic monitoring that key controls are in use and effective (NPU, wetting, control of waste, selection of respiratory protection equipment (RPE), DCU set-up and use); personal exposure monitoring; and confirmation of waste disposal through tip dockets.
- 16 WorkSafe NZ amends the ACOP so that for A Class work the licensed assessor should be required to inform WorkSafe NZ of satisfactory completion of the work (in the way that a Building Inspector signs off construction work) and report any serious concerns.
- 17 WorkSafe NZ amends the ACOP and guidance so that the minimum RPE and decontamination requirements for different categories of work are clearly stated. This should include full-face, powered P3 respirator and a fully equipped, suitably-sized, three-stage decontamination unit (DCU) as the minimum for all Class A work.
- 18 WorkSafe NZ undertakes a targeted intervention to better understand the extent of use of labour hire in the industry and how overlapping Person Conducting a Business or Undertaking (PCBU) duties are discharged between the parties.
- 19 WorkSafe NZ provide clarification around when personal exposure monitoring inside asbestos enclosures is required.
- 20 WorkSafe NZ consults with industry players (including NZDAA, FAMANZ, the Australian Faculty of Occupational Medicine, Te Whatu Ora and others) about the establishment of a central health register for asbestos workers that holds records of asbestos medical examinations, exposure incidents and personal or environmental monitoring results.
- 21 WorkSafe NZ revises the ACOP on waste labelling and transport to require all asbestos waste leaving a site to be clearly labelled on the primary container (bag or bin) and on the outer container (skip, truck or vehicle). The ACOP could incorporate a preferred label design which is similar to those for other types of hazardous waste and includes an emergency contact number. Vehicles transporting asbestos waste should carry emergency response information in a standardised form.
- 22 WorkSafe NZ and WasteMINZ work with the Ministry for the Environment and TLAs to develop a public register of landfill sites that will accept different types of asbestos waste.
- 23 WorkSafe NZ makes greater use of the findings from its interventions and regulatory activities to inform industry partners as to areas of consistent poor performance to target improvements.

About the author

Mike Cosman is one of New Zealand's leading health and safety professionals with 43 years' experience in the UK and New Zealand. He is a Chartered Fellow of the Institution for Occupational Safety and Health and a Certified Fellow of the New Zealand Institute of Health and Safety Management. He holds a Degree in Management and a Post Graduate Diploma in Occupational Safety and Industrial Hygiene.

Mike's interest in asbestos matters started in the 1970's through a chance meeting with a pathologist studying death and disease rates amongst gas mask workers in a wartime factory.⁸ This was a classic epidemiological study: the women concerned had very well-defined exposure patterns and a single source (the filter material used was crocidolite (blue asbestos). The new maternity ward at the hospital where the pathologist worked was being sprayed with limpet asbestos – despite his protestations.

On a personal level he has seen a close friend die from mesothelioma and has assisted victims in their battle with Accident Compensation Corporation (ACC) to get their claims for compensation accepted.

After graduating, Mike joined the UK Health and Safety Executive (HSE) as HM Inspector of Health and Safety and became one of a small group specifically trained to inspect asbestos manufacturing and removal operations and enforce the relevant standards.

Mike's career progressed and he had roles dealing with the health sector, which had a massive legacy of ACMs in ageing estates, as well as across other industries. This allowed him to maintain his currency in asbestos matters. Prior to leaving the UK, he was Head of the Construction Sector for the HSE which included oversight of the Asbestos Licencing Unit and developing the overall intervention strategy for the 200-strong Construction Division, including in relation to work with asbestos.

In 2004 Mike moved to New Zealand to become the National Operations Manager and then Chief Advisor Health and Safety for the Occupational Health and Safety Service of the Department of Labour (OSH). This role included professional leadership of all the operational inspectors, technical specialists as well as sector leads, including asbestos related issues.

From 2007-2014 Mike was Managing Director of Impac Services Ltd and worked with a range of clients involved in asbestos matters – particularly the Earthquake Commission (EQC) and Fletcher Earthquake Recovery (EQR) after the Canterbury earthquakes. He developed and ran training for the MBIE Inspectors involved in the rebuild.

In 2012, Mike was the only health and safety professional to be a member of the Independent Health and Safety Taskforce established by the then Minister of Labour after the Pike River Mine tragedy. This involved reviewing all aspects of the New Zealand health and safety system and making recommendations, including about the management of asbestos. This report led to the establishment of WorkSafe NZ and the development of the Health and Safety at Work Act 2015 and associated Regulations. Mike was involved in the working group that developed the ACOP and in agreeing the standards for Certified Health and Safety Management Systems for Class A licence holders.

From 2014 to now Mike has been a partner in CosmanParkes, a strategic health and safety consultancy working with a wide range of public and private sector clients across different sectors. His recent work involving asbestos has been with large clients providing advice on a number of technical and strategic issues.

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2078006/>

The Asbestos Industry and the harm caused

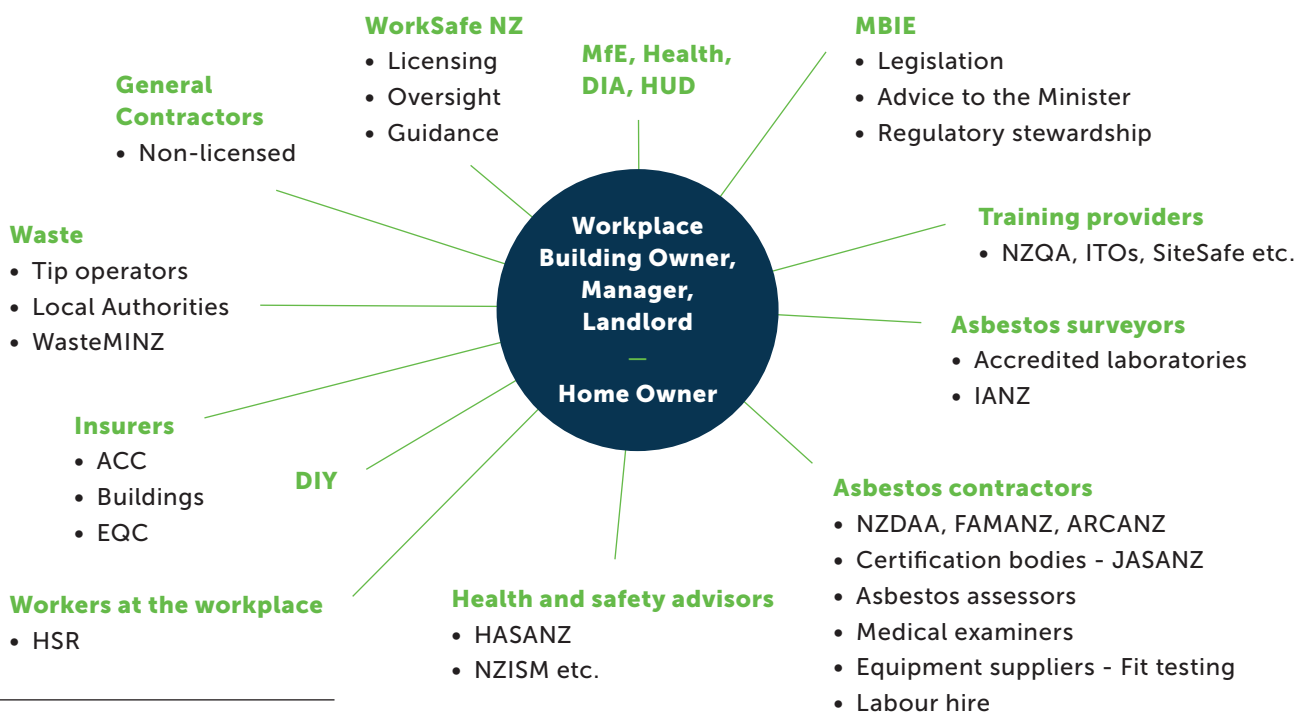
The asbestos industry in New Zealand encompasses a wide range of diverse parts. There are those directly involved in identifying, assessing and removing asbestos; the waste industry; hauliers; equipment suppliers; training providers; laboratories; medical practitioners; epidemiologists; building owners and their workers; home owners; construction workers; consultants; researchers; occupational hygienists and advisors; regulators including WorkSafe, Public Health, and local authorities; central and local government agencies; insurers including ACC; health care providers; and many others.

A crude estimate of the size of the asbestos management and removal industry puts it at >\$500m per year engaging tens of thousands of people. However, the diversity of the industry means that it does not come under any easily identifiable category within official statistics. It is not generally considered as an ecosystem with multiple moving parts; rather, it is disaggregated into individual elements which are only looked at in isolation, if at all. We have not seen a system map that shows the various parts and how they are connected, so have had to devise one for ourselves as part of this review (Fig. 2).

The industry as a whole has no focal point. There is no umbrella asbestos industry body. NZDAA represents about 30 percent of licenced removalists (but 60+ percent of notified work) and FAMANZ represents some of the professional services associated with the industry (environmental, hygiene, labs, assessors) with 66 members in New Zealand. NZDAA and FAMANZ have recently signed a Memorandum of Understanding to try and encourage closer cooperation. BRANZ and the Australasian Land & Groundwater Association (ALGA) have worked together on asbestos in soils,⁹ while WasteMINZ has also been working on asbestos waste disposal guidance and separate guidance on the disposal of asbestos contaminated soil.

In countries like the UK, there are discrete groups representing specific sections of the industry such as Asbestos Removal Training Association, Asbestos Removal Contractors Association, Asbestos Testing and Consultancy Association, British Safety Industry Federation, etc. There is therefore greater opportunity to agree and apply industry standards without necessarily requiring new Regulations, but with close oversight by the regulator.

Figure 2: Asbestos ecosystem map



⁹ Although BRANZ is no longer associated with this.

There is no regular liaison forum for the industry to talk to WorkSafe. New Zealand lacks anything like the Australian Asbestos Safety and Eradication Agency (ASEA) that takes a national overview of all asbestos issues, regardless of setting, and considers public health as well as occupational health aspects of asbestos.

There is also no current estimate of how many workplace and residential buildings still contain ACM, in what quantity, and in what condition. Therefore, the future demand for asbestos removal services is unknown. Proposals for a national asbestos register were discounted by Cabinet when the Regs were being scoped. An estimate from MBIE in the cabinet paper suggested about 30,000-40,000 buildings would be covered by the requirement for an AMP.¹⁰ In our view, from personal experience and speaking to others in the sector, this is a gross underestimate – possibly by a factor of 10.

What is clear is that many of the buildings and items of plant that contain asbestos are progressively deteriorating and are approaching or have exceeded their design life. The peak of use of ACMs was in the 1960s and 70s, making these buildings now over 50 years old. However, the current management in-situ approach allows ACMs to remain in older buildings as long as they can be contained. This is in contrast to international moves (referred to later) to set deadlines for active removal of ACMs in certain situations.

Changes in industry and planning rules mean that certain types of buildings are no longer required, and that there will be an increase in development of brownfield sites including the widespread removal of old houses as part of urban densification. Many of the old villas and former state houses are likely to contain ACMs and leave behind contaminated soils.¹¹ Pressure to reduce construction waste going to landfill may inadvertently increase risk, if not properly managed, as more building products are recycled.

The Government introduced a ban on importation of products containing asbestos in 2016. However, Customs do not carry out proactive testing at the border. As supply chain constraints and domestic pricing issues challenge the construction industry, there may well be an increase in direct sourcing of products from countries with less robust standards around the use and declaration of asbestos.

Without proactive testing, we cannot be sure that asbestos-containing products are being prevented from entering our industries. This should be seen in the context of global mining of raw asbestos still being around 1.2m tonne per year.¹²

The four phases of asbestos exposure are shown below. New Zealand is currently in phases three and four.

Figure 3: The four phases of asbestos exposure¹³



¹⁰ <https://www.mbie.govt.nz/dmsdocument/4596-cabinet-paper-b-policy-decisions-to-support-the-new-health-and-safety-at-work-act>

¹¹ See for example <https://www.aucklandcouncil.govt.nz/ResourceConsentDocuments/258-268hobsonvilleptrd-22-appd-remedialactionplan.pdf> <https://www.nzherald.co.nz/rotorua-daily-post/news/asbestos-contamination-adds-cost-to-kawerau-housing-development/4MI5JTAT6UTJ4RPAJZAZISIWM4/>

¹² <https://www.statista.com/statistics/264923/world-mine-production-of-asbestos/> A typical ACM may contain around 1-10 percent asbestos bw so this could mean over 10m tonnes of ACM produced per year.

¹³ Landrigan, P.J. The third wave of asbestos disease: Exposure to asbestos in place—Public health control. Introduction. *Ann. N. Y. Acad. Sci.* 1991, 643. The fourth phase was added by Wallis et al 2020.

The above factors suggest that the risks associated with ACMs in workplace buildings are significant and likely to be with us for many years to come – hence the opportunity to improve the performance of the wider asbestos industry will provide benefits to workers and the public.

ACC typically compensates around 60-70 new mesothelioma cases per year, but only very few other asbestos-related diseases (Fig. 4). Its data unfortunately combines mesothelioma and lung cancer in one group, and asbestosis and silicosis in another. International estimates suggest there may be between one and 10 lung and other cancer

deaths for every case of mesothelioma. As these are difficult to diagnose accurately, they largely fall outside the current compensation system. Asbestos exposure can also be a catalyst in conjunction with smoking, so this can complicate matters further as smoking is/was disappointingly higher amongst tradespeople and asbestos workers.

Department of Health data indicates around 100 new diagnoses of mesothelioma per year, so the compensated rate may be as low as 70 percent as not all case of mesothelioma lead to an ACC claim and not all claims are accepted.¹⁴

Figure 4: Annual mesothelioma diagnoses

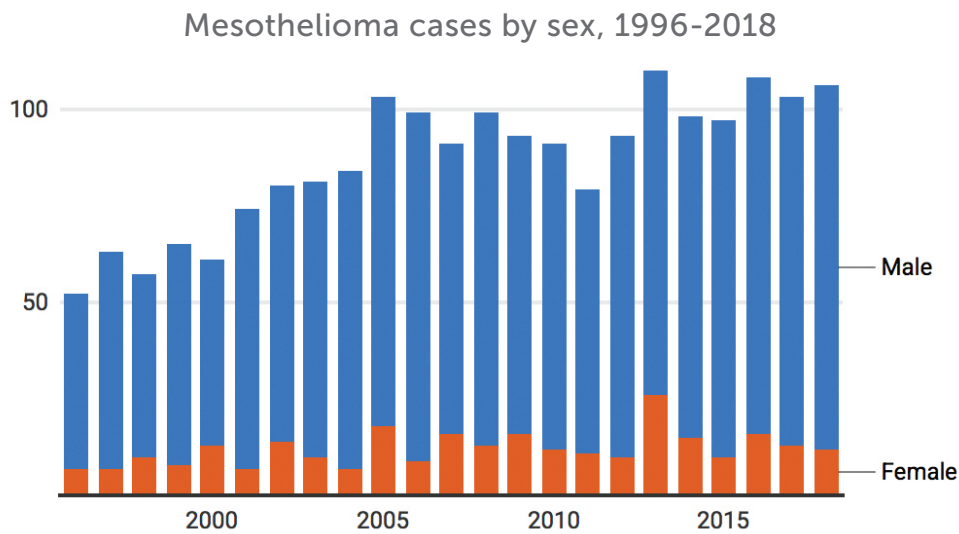


Chart: Nikki Macdonald • Source: New cancer registrations 2018

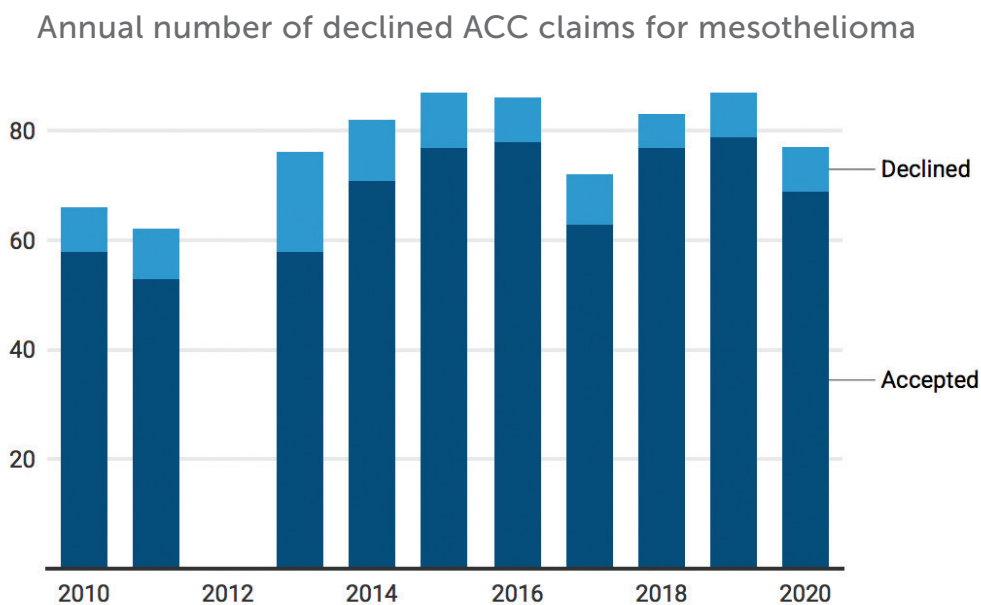
¹⁴ See Appendix 4 for more detail.

Given the long latency and global movement of workers, some of those diagnosed in New Zealand may have been exposed overseas; others exposed in New Zealand may be living elsewhere at the time of diagnosis and hence not included.

WorkSafe NZ have identified asbestos as one of the key components of its airborne contaminants and carcinogens priority programme which in turn accounts for 31 percent of the total burden of work-related harm.¹⁵ There is general agreement amongst epidemiologists that around 250-300 deaths per year are attributable to historic work-related asbestos exposure.

However, the historic exposure to asbestos is something that we have little opportunity to influence other than through earlier diagnosis and better treatments. Whilst these can be highly effective for lung and other cancers, mesothelioma remains stubbornly difficult to diagnose and treat with death occurring typically within a year or so of diagnosis.¹⁶ Therefore, any meaningful strategy to address this issue has to minimise current exposures through the design and application of best practice controls, supported by a robust verification system. Currently, only parts of this exist in New Zealand.

Figure 5: ACC accepted mesothelioma claims



2012 data was not provided. Chart: Nikki Macdonald • Source: ACC

¹⁵ <https://www.worksafe.govt.nz/dmsdocument/42184-improving-work-related-health/latest>

¹⁶ <https://www.asbestos.com/mesothelioma/prognosis/>

Terms of Reference and Methodology

The Terms of Reference (ToR) agreed by NZDAA for this review are as follows:

Purpose:

- 1 To review progress of the Asbestos Industry [sector] in relation to the health, safety and wellbeing of their businesses and workers since the enactment of the Health and Safety at Work (Asbestos) Regulations on 4th April 2016 [*the Regulations*];¹⁷ and
- 2 To recommend a package of practical measures that will improve health, safety and wellbeing of business and workers in the performance of their work under the Regulations.

Essentially: what's changed for us, how has this impacted us, and how we move forward

The NZDAA seeks to test the following hypotheses:

- 1 The quality of asbestos identification surveys and management plans has improved since 2016 with the introduction of the WorkSafe NZ Good Practice Guidelines.
- 2 The management of in-situ ACMs and the quality and safety of asbestos removal work has significantly improved as a result of the changes that occurred in 2016, including the Regulations, licensing requirements and defined competency standards for all participants.
- 3 Focusing primary legal responsibility on the licenced PCBU (rather than the individual Certificate of Competence holder) has had a significant influence on raising the health and safety performance of removal operations.

- 4 The Asbestos Industry is now subject to more effective scrutiny over its performance and quality by contracting clients and their professional services advisors, licensed assessors and regulators, including as a result of the need to develop and be accountable for ARCPs asbestos Removal Control Plans.
- 5 There is objective evidence that asbestos workers are exposed to lower levels of asbestos fibres inside enclosures than prior to 2016.
- 6 There has been a significant increase in the number of sector participants than prior to 2016 within all professions which has increased the overall knowledge and experience base of the industry.
- 7 The percentage of failed clearances and exceedance of exposure standards confirms that the majority of asbestos removal projects are meeting requirements.
- 8 The transport and disposal of asbestos waste is carried out predominantly by transporters using drivers who hold Dangerous Goods license endorsements and in vehicles that have Dangerous Goods declarations and placarding of the transport vehicle (Section 156 Land Transport Act 1998).
- 9 Practices within landfills and facilities that accept asbestos waste have improved as a result of the changes that occurred in 2016.

The review commenced in January 2022 with field work and interviews conducted between February and July 2022.

¹⁷ Note: the Asbestos Industry includes, but is not limited to: those PCBUs responsible for workplace premises with asbestos containing materials (ACM); surveyors; licensed asbestos removalists and asbestos assessors; IANZ-accredited analytical laboratories; health, safety and environmental consultants; hazardous materials transport operators; registered asbestos disposal facilities; regulators (including WorkSafe NZ, TLAs and others); and the officers and workers of those PCBUs.

Limitations

Given data limitations, the review is predominantly a qualitative analysis based on the views of those who contributed. Participants were largely self-selected or referred by others and hence may not be illustrative of the whole industry, especially those parts that are not represented through industry groups or do not see themselves as part of the mainstream asbestos sector.

Data obtained from WorkSafe NZ, ACC and MBIE under the Official Information Act and subsequent engagement has been anonymised to protect privacy.

Given the workforce dynamic it has been challenging to get representative views from workers-especially those who have left the industry, casuals and labour hire. Many of these workers are likely to be vulnerable-new migrants, non-English speakers, Māori and Pacifica, young workers and others.

Project Governance

A steering group of industry stakeholders was established to oversee the project and provide on-going advice on the scope and direction of effort. Members of the Steering Group were:

- **Helina Stil** (NZDAA)
- **Bridgette Jennings** (FAMANZ)
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Views expressed in this report are those of the author alone and do not represent the official position of NZDAA, FAMANZ or any other organisation.

Asbestos surveys

Hypothesis 1: That the quality of asbestos surveys had improved since the commencement of the HSW (Asbestos) Regulations.

Hypothesis 2: The management of in-situ ACMs and the quality and safety of asbestos removal work has significantly improved as a result of the changes that occurred in 2016, including the Regulations, licensing requirements and defined competency standards for all participants.

The quality and value of an asbestos survey is dependent on four things:

- The building owner identifying the need/obligation.
- Defining the correct scope of work.
- The competence and relevant experience of the surveyor.
- The availability and application of the survey information by those who may be exposed to ACMs now and in the future.

Identifying the need

Since the Regs came into effect in 2016, there has been limited publicity about the requirement for building owners to undertake asbestos surveys in order to produce AMPs, or for those planning or undertaking renovation or demolition work to commission an intrusive asbestos survey report to identify potential ACMs and arrange for them to be removed prior to work starting.¹⁸ Enforcement data from WorkSafe NZ shows only 60 enforcement notices were issued over six years (2016-2021 inclusive) referencing the duty to develop an AMP in Reg 13 with a further 87 relating to Regulations 10,11 and 12.¹⁹ Whilst there was a flurry of activity between 2016 and 2018 (when the duty came fully into effect), the evidence as to how effective it has been is mixed.

Large property owners in both private and public sector have probably been the most proactive, as they have professional managers with the knowledge and systems to procure the right surveyors to carry out this work and then to use it as part of their ongoing property/facilities management function. A number of good practice examples were highlighted at the WorkSafe Public Sector Asbestos Conference in 2021.²⁰

Owner occupiers, private commercial property owners, small scale developers and others appear to be less well informed and are more likely to adopt reactive (fix it when it breaks) maintenance policies.

Those involved in the sale and purchase of commercial property do not routinely ask for or supply AMPs to prospective purchasers, although some banks are now starting to ask for information when making lending decisions. The Real Estate Institute of New Zealand (REINZ) note on their website (see box below) that the duty is only to disclose what is known or to advise a prospective purchaser to undertake their own enquiries.²¹ We understand that in parts of Australia it is a condition of offering certain types of property for sale that an up-to-date asbestos survey must be provided.²²

Whilst the Regs do not apply to residential properties as regards management surveys and plans they do apply to any developer or builder undertaking renovation or demolition work on such premises (as in Reg 26). Social housing providers such Kāinga Ora and local authorities have tended to apply the principles of the duty in order to protect their tenants and contractors.

¹⁸ Part 2 Subpart 2 (Regs 10-14) and Subpart 4 (Regs 19-26) of the HSWA (Asbestos) Regs

¹⁹ See table in Appendix 2

²⁰ <https://www.worksafe.govt.nz/topic-and-industry/asbestos/asbestos-management-in-public-sector-conference>

²¹ <https://www.blog.reinz.co.nz/blog/disclosure-of-defects>

²² <https://www.airsafe.net.au/news/what-real-estate-agents-should-know-about-asbestos/>

An August 2019 case demonstrated the dangers of not qualifying statements. The licensee in that case gave an opinion to the purchasers, as to the presence of asbestos in that, he did not think that the property contained it when the purchasers had viewed the property. There was no evidence that the licensee qualified his statements to the purchasers, or that he had made enquiries of the vendor, or that would make further enquiries. He did not make it clear to the purchasers that, whilst he thought the property did not contain asbestos, they should be making their own investigations in that respect. The Consumer Advisory Committee (CAC) stated that once the purchasers had flagged asbestos as a matter of importance to them, the licensee had an obligation to either ensure that there was no asbestos present at the property or to recommend that the purchasers sought independent expert advice. The licensee took neither of these actions, and the CAC found that the licensee had misled the purchasers by not qualifying his opinion to the effect that the property had no asbestos.

Given the significance of this first step of recognising the need to identify and assess the possible presence of ACMs in workplace buildings, we think an awareness campaign should be mounted. This should be run in conjunction with a range of organisations involved in commercial property matters, to remind owners or those in control of the building that they need to develop or update their AMPs (given the five-year review requirement in Reg 14) to ensure that the information is accurate.

Intrusive surveys for demolition or refurbishment, where they are carried out, are equally variable in quality and usefulness. Evidence from asbestos removalists suggest that intrusive surveys are often not carried out (or reliable) prior to work being tendered, and this makes it difficult for contractors to price on a consistent basis. Some contractors use this to their advantage as they can put in a competitive price then tag their tender if any further asbestos is discovered. Others rely on their estimator (often a supervisor) to make an assessment.

It is also still common for asbestos contractors to only be called in after a discovery has been made suggesting tradespeople may have already been exposed to ACM and are not asking for survey reports before they start work.²³

Scope of work

The primary responsibility for commissioning the survey sits with the owner PCBU and their professional services advisors (architect, project manager, main contractor). We have experience of several major refurbishment projects that went significantly over budget and time due to a failure to properly consider asbestos issues in scoping the project and developing the methodology. Attempts to do piecemeal removal or floor-by-floor decants can easily go wrong, given that asbestos can migrate vertically and horizontally through buildings systems such as lift shafts, air conditioning, false ceilings, service risers, etc.

Respondents report a lack of awareness on the part of some clients and their advisors as to the difference between a management (non-intrusive) and refurb/demo survey (intrusive). There do not appear to be any structured programmes to raise awareness of asbestos amongst such construction industry professionals either during graduate study or as part of continuous professional development.²⁴

²³ <https://www.stuff.co.nz/business/industries/128759434/couple-claim-carpet-court-franchise-left-85yearold-with-50k-bill-for-asbestos>

²⁴ For example the New Zealand Institute of Buildings Surveyors Core Module Training Programme 2022 makes no mention of asbestos <https://buildingsurveyors.co.nz/training-and-events/training-and-qualifications-we-offer/>

²⁵ <https://www.worksafe.govt.nz/dmsdocument/11-conducting-asbestos-surveys>

Those working in the asbestos surveying sector and their clients report a high degree of variability in the quality of management survey reports with some being predominantly presumptive with few samples taken. The survey guide permits presumptive management surveys, which places a high degree of reliance on the knowledge and experience of the surveyor to identify potential ACMs purely on visual appearance.²⁵ This can lead to both false positives and negatives especially for less experienced surveyors who may not have seen a wide range of ACMs or had the opportunity to have their assumptions validated through subsequent sampling. In practice, a presumptive survey is of little value.

Examples are common of generic management plans with a few photos of 'possible asbestos containing materials,' and an occasional sample. The range of exclusions in these reports is such as to render the plan virtually meaningless. In part, this is driven by a price-sensitive market, especially for small to medium sized enterprises who, if they are aware of the requirements on them, just want to tick and forget. On the other side some large clients report excessive sampling and hence price escalation as these are normally not included in the base estimate but charged at cost.

Best-practice examples include some Government agencies and large property companies who are aware of the asbestos liability they carry in their estates and the need to manage this strategically. Some boards are also asking about asbestos as part of critical risk management programmes. For example, one multi-site commercial business is part way through a \$25m multi-year asbestos remediation programme as part of its overall capital investment programme.

Surveyor competence

There is some confusion or lack of awareness as to the level of training and experience required in order to carry out asbestos surveys and many in the industry would like to see this role covered by licensing or accreditation requirements in order to recognise the importance of the function. There is currently no means by which a prospective

client for an asbestos survey can get independent assurance that the surveyor is competent and experienced in the type of work needed.

The WorkSafe Good Practice Guide Conducting Asbestos Surveys is quite vague on surveyor competence and simply states:

The asbestos surveyor should be able to provide the following information to a prospective client PCBU:

- > *Details of any relevant accreditations or qualifications.*
- > *Copies of their written procedures (including risk management and quality control policies) and references or other evidence of recent similar work.*
- > *A written declaration which states that the surveyor can operate with independence, impartiality and integrity*
- > *A written declaration that personnel carrying out the work are adequately trained for all aspects of the work taking place.*
- > *Information on their limitations.*

There are no mandatory qualifications for asbestos surveyors.

This effectively puts the responsibility for assessing competence on the client, who will often have very little knowledge of what to expect or ask for. Self-declaration is unlikely to weed out incompetent surveyors who see this type of work as a good money spinner.

WorkSafe issued further guidance in 2017 that is more specific, but still only framed as a recommendation:

WorkSafe recommends that at a minimum surveyor should:

- *have a minimum of six months practical experience of carrying out asbestos surveys under the supervision of experienced and suitably qualified personnel, and*

²⁵ <https://www.worksafe.govt.nz/dmsdocument/11-conducting-asbestos-surveys>

- be able to provide evidence that they have completed at least three management survey reports, and
- be able to provide evidence that they have completed at least one pre-demolition survey alongside another more experienced surveyor, and
- hold a British Occupational Hygiene Society P402 Building Surveys and Bulk Sampling for Asbestos qualification, or equivalent.²⁶

As the role of surveyor is not subject to licensing, there is no check that surveyors do in fact meet these requirements.

A review of the WorkSafe enforcement data is unable to determine if any enforcement action has been taken against surveyors as obligations in the ACOP and Guidance are not likely to be linked to specific sections in the Regulations and hence covered under the general duties of HSWA.

WorkSafe's response to the question, How does WorkSafe directly or indirectly monitor the performance of surveyors? included the following comment (emphasis added):

*Asbestos surveying is not a regulated activity under the Regs and is therefore **outside of WorkSafe's jurisdiction for monitoring.** [...] The PCBU will need to seek assurance from the person about their competence to do the work. The assurance should cover the above matters, and should explain why they believe they are competent to do the work. The PCBU will need to judge whether the person is suitably competent."*

In our view, this comment completely misses the point, and WorkSafe does have jurisdiction for ensuring those surveyor PCBUs or workers are in fact competent for the role. They could also verify that those who engage surveyors are carrying

out competence checks, as they would for any professional services provider or contractor they engage.

Whilst the WorkSafe Survey Guide is useful, it is not as comprehensive as the recently updated HSE equivalent which runs to over 200 pages and goes into much greater detail on surveying, clearance testing, air monitoring etc.²⁷ Many professionals in the industry work to the UK guidance given this degree of specificity.

There are four main categories of survey work (Fig. 6), not including contaminated land which is a very different area. Each requires a different skill set and level of experience, yet the market is not differentiated in any way and the competence requirement set out above means that someone who has shadowed one house refurbishment survey would then be deemed competent and experienced enough to assess a major industrial site.

Some specialist house surveyors spoken to (typically undertaking pre-purchase inspections that might include meth contamination and leaky buildings as well as asbestos) would welcome the ability to achieve limited accreditation for this one aspect, as they have no interest in being able to undertake intrusive surveys of commercial and industrial buildings

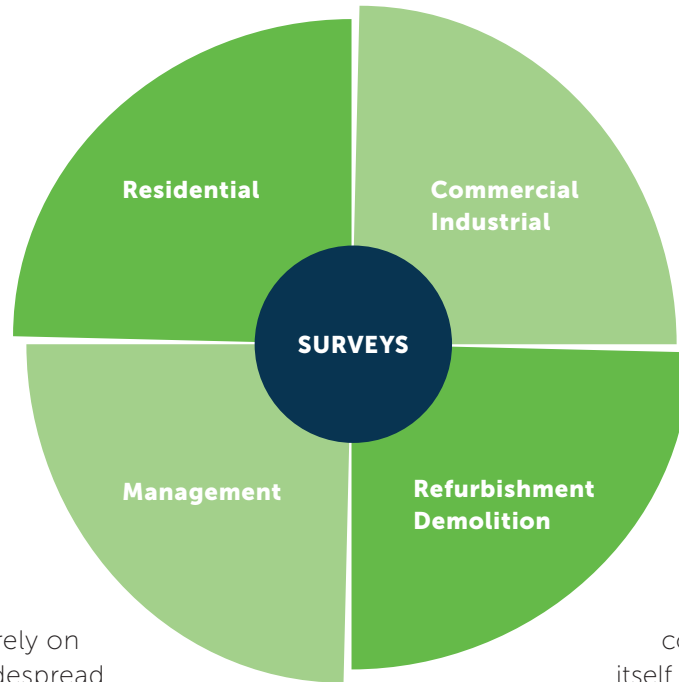
Risk assessments in AMPs can use different algorithms leading to different conclusions as to what action to take. There is an algorithm in the WorkSafe guidance that only looks at three characteristics of the ACM-type of product, condition and degree of encapsulation or protection. This gives a range of scores from three to nine. The UK HSE guidance (HSG 264) used by many surveyors includes a material score and a priority score giving a much more meaningful result.²⁸ Specifying a single risk assessment process would ensure greater consistency of approach.

²⁶ <https://www.worksafe.govt.nz/dmsdocument/1868-asbestos-key-duties-for-surveyors-and-assessors>

²⁷ <https://www.hse.gov.uk/pubns/priced/hsg248.pdf>

²⁸ <https://www.hse.gov.uk/pubns/priced/hsg264.pdf> <https://www.hse.gov.uk/asbestos/assets/docs/materials-priority-scoring.pdf>

Figure 6: Four main categories of asbestos surveys



Clients, including asbestos removal companies, who rely on the surveys also report widespread differences in risk assessments, determination as to whether certain ACMs are friable or not, completeness (especially ‘intrusive’ surveys that do not fully investigate the structure) misleading estimates of quantities and generic reports with multiple caveats that simply serve to confuse rather than inform.

Where asbestos surveying is carried out by someone who is also a licenced assessor there is generally a more reliable outcome given their focus on ensuring all relevant ACMs are correctly identified and removed.

Friability, the 10m² rule, and Asbestos Contaminated Dust and Debris (ACD)

The variability in determination of what is ‘friable’ (and hence Class A or B work) is highly subjective, and in our view, unreliable. The definition of the term – “able to be crumbled, pulverised, or reduced to a powder by hand pressure when dry”, as it appears on the WorkSafe website – is un-quantified as it only relates to the material in its current state. If the purpose of differentiating between Class A and B work is the propensity of the ACM to produce respirable fibre

then this needs to be a combination of the material itself, its condition and the impact of the proposed work method. ACD by definition implies there is loose fibre present – most likely from degradation of the ACM it came from – or overspray of limpet. As such, in our view ACD presents a greater risk than is currently recognised in the ACOP and Regulations. Further, no licence is required to remove less than 10m² of non-friable asbestos over the course of the whole removal project, or in the case with removing ACD is not associated with the removal of friable or non-friable asbestos and is only a ‘minor contamination’.²⁹

Minor contamination is not defined, but Appendix D states that the asbestos removalist will need to carry out a risk assessment. For such non-licensed work there is no licenced asbestos removalist involved.

It also states that *The amount of ACD cannot exceed that which would, in other circumstances, be associated with safely removing 10m² or less of non-friable asbestos.* This is an almost impossible test to meet given the variability in what such a job might entail. A fibrolite shed roof that has degraded due to weather and thermal stress may contain quite a large amount of ACD which has contaminated the gutters and area around the shed.

²⁹ <https://www.worksafe.govt.nz/topic-and-industry/asbestos/roles-and-responsibilities/asbestos-removal/>

These highly important decisions are currently being made by unlicensed surveyors and will impact who is then engaged to do the actual work. This further supports our view that surveyors should be better regulated and quality assured.

We heard several views that suggested that the 10m² exemption from licensing was being widely gamed or stretched beyond its intended application to very minor works such as drilling a hole in a soffit to run a cable.

We recommend that careful consideration is given in the ACOP review process to providing much greater clarity on how, who, and when to apply these highly subjective assessments with more specific guidance to encourage greater consistency of decision making and more examples of safe working practices for non-licensed work.

Survey use

From our experience, many AMPs and supporting registers have not been updated to reflect changes that have occurred since they were written. Further, regular condition monitoring requirements for ACMs in situ have not been carried out or documented, and AMPs are not always routinely and proactively shared with tenants, contractors or others. AMPs developed when the requirement first came into effect in 2016 will now be due for a five-year review in accordance with Reg 14 (1)(e).

The perception of some surveyors was that AMPs were typically 'left in a drawer' and not actively promulgated to contractors, tenderers, workers and others. In some sectors there was great reluctance to affix warning labels – especially in public facing areas. Surveyors report very low interest in annual condition monitoring or other actions recommended in the AMP

Best practice described by one large client has asbestos survey information included in an electronic Building Information Model (BIM), whilst others use QR codes so contractors can easily access databases with survey information prior to starting work (if they are minded to do so).

On the other side there is little evidence that contractors, especially small builders and tradespeople are asking about the possible presence of ACMs when scoping or starting work. Evidence given to a recent Parliamentary enquiry in the UK suggested even in that more mature market, less than 50 percent of builders asked for or were given information on ACMs prior to starting work.³⁰

³⁰ <https://committees.parliament.uk/work/1393/health-and-safety-executives-approach-to-asbestos-management>

The Licensing Process

Hypothesis 3: Focusing primary legal responsibility on the licenced PCBU (rather than the individual Certificate of Competence holder) has had a significant influence on raising the health and safety performance of removal operations.

The Regs moved New Zealand into a licencing regime for certain activities. The main change being to move away from personal Certificates of Competence (COC) to licencing of asbestos removal businesses. This change was consistent with the overall approach in the Health and Safety at Work Act (HSWA) where duties are largely on the Person Conducting a Business or Undertaking (PCBU). Workers and Officers also have duties under HSWA which apply to those in the asbestos industry as well.

Two types of PCBU removalist licences are prescribed: Class A for friable asbestos, and Class B for non-friable.

Personal certification was introduced for Assessors undertaking clearance work for Class A removals; certification was continued for Asbestos Supervisors (typically former COC holders) who have to be named on a PCBU licence and have specific duties.

In June 2022 there were 102 Class A licence holders, 229 Class B licence holders (which includes most of the Class A licence holders) and 318 Assessors. This appears to be a very large group of licence holders given the size of the New Zealand market. The UK HSE does not publish a licence register but a Freedom of Information Act request in 2020 appeared to show a total of 395 current licences for a country approximately 20 times larger than NZ.³¹ We were told that the market in New Zealand is over-supplied leading to intense competition, price cutting, and potentially shortcuts being taken. Many removalists struggle to get a regular supply of work which leads to high labour turnover, casualisation and use of labour hire. Those that invest heavily in people, plant and process may be at a commercial disadvantage against the less scrupulous.

In our view, obtaining and retaining a licence should be a privilege to be hard earned, not a right.

The fee to obtain an asbestos licence in New Zealand is \$490 and the licence lasts for five years (approximately \$100/year). By contrast, in the UK a licence costs £3,439.00 (approx. \$7,000 in 2022) and the initial licence only lasts for one year but can be renewed every three years for a similar cost (\$3,500/year over 4 years). In New South Wales, Australia, a Class A licence costs A\$5,871.00 and a Class B A\$1,066.00 but lasts for five years; in Victoria A\$1,137.80 for a Class A licence and A\$969.40 a Class B licence, again for a five-year duration.

This suggests that the cost of entry to the industry for a PCBU in New Zealand is low by international standards, although there are additional costs for obtaining and maintaining a Certified Health and Safety Management System for A Class licence holders.

Our enquires of WorkSafe about the operation of the licencing regime were mainly around the placing of conditions on licences and suspensions, revocations and non-renewals.

They report that 54 removal licences have been cancelled since 2017 (although none since 2020). Of these, 29 were Class A and 25 Class B. 49 licences were voluntarily surrendered (possibly due to business failure). In total, 203 licence actions were taken in this period.

Examples of licence conditions being imposed include:

- When Class B licensed asbestos removal work is to be carried out the licence holder must for the period of twelve (12) months, at the time the work is notified to WorkSafe under regulation 34 of the Health and Safety at Work (Asbestos) Regulations 2016, provide WorkSafe with the following
 - A copy of the asbestos removal control plan that it is required to be prepared under regulation 32 of the Health and Safety at Work (Asbestos) Regulations 2016.

³¹ https://www.whatdotheyknow.com/request/asbestos_licence_database

- A copy of the documentation relied on to detail the location, type, and condition of the asbestos in the plan, including any asbestos survey results.
- The licence holder must keep the asbestos removal control plan, the documentation referred to, and the notification to WorkSafe under regulation 34 in a location that can be easily accessed at the workplace where the asbestos removal work is to be carried out, until the licensed asbestos removal work is complete.
- Upon completion of Class B licensed asbestos removal works, the license holder must for the period of twelve (12) months provide WorkSafe with evidence of asbestos waste disposal at a place approved for the purpose by a territorial authority under section 73 of the Resource Management Act 1991.

From April 2021, all granted and renewed Class A licences have four new conditions applied:³²

1. Whenever the licence holder carries out Class A licensed asbestos removal work during the period of this licence, the licence holder must, at the time the work is notified to WorkSafe under regulation 34 of the Health and Safety at Work (Asbestos) Regulations 2016, have the following in place:
 - a. An asbestos removal control plan that the licence holder is required to prepare under regulation 32 of the Health and Safety at Work (Asbestos) Regulations 2016.
 - b. A copy of all the information relied on to detail the location, type, and condition of the asbestos in the asbestos removal control plan, including any asbestos survey reports.
2. If requested by WorkSafe, the licence holder must immediately provide to WorkSafe a copy of all the information referred to in condition 1 above by emailing: asbestos@worksafe.govt.nz

3. The licence holder must ensure the asbestos removal control plan, the information referred to in condition 1 above and the notification to WorkSafe under regulation 34 are readily accessible at the asbestos removal area where the Class A asbestos removal work is being carried out, until the work is completed.

4. During the period of the licence, the licence holder must provide WorkSafe with a copy of any audit report issued by an auditor accredited by JAS– ANZ or NATA relating to the licence holder’s certified safety management system no later than five days after the report has been issued by the auditor.

Surprisingly, the Asbestos Licence Register does not record any conditions that have been imposed, and most ARCPs only show the licence number not the actual licence. This makes it difficult for clients to know what conditions have been put on a licence and hence which might impact on the licensee. We think that the Register should show conditions, especially non-standard ones, and that a copy of the current licence should be required as part of the ARCP.

We heard feedback from industry that the whole licence process was paperwork driven with little coordination between findings from operational interventions and the licensing team. We also heard anecdotally that WorkSafe was ‘targeting’ certain contractors and looking for reasons to withdraw or refuse to renew their licence. There was no objective evidence to support this view.

We asked WorkSafe’s the following question: *Please explain how data from assessments is used to inform (re)licencing decisions. Are there decision-making criteria around this? I note enforcement notices do not have to be declared on the application form.*

We received, by way of response: *Out of scope as it relates to the way the regulator executes its functions.* We found this response somewhat disappointing as we would expect there to be clear and open criteria and processes for gathering and assessing operational intelligence about licensee performance as a part of the licensing process.

³² <https://www.worksafe.govt.nz/assets/dmsassets/WKS-17-Asbestos-Removalist-Applicant-Guide.pdf>

The Applicant Guide is unclear on the criteria other than those set out in the Regulations and simply states:

When making a decision to grant or renew an asbestos removal licence, WorkSafe must be satisfied that:

- *the applicant can carry out work and other activities to which the licence relates to safely and competently*
- *the applicant is able to ensure compliance with any conditions that will apply to the licence*

The application form does not ask for references or details of experience, and only seeks a declaration that the applicant has no past HSWA or RMA convictions or enforceable undertakings. It does not ask about Prohibition or Improvement Notices or other regulatory actions.

According to the information provided in August 2021, only eight charges involving asbestos have been successfully prosecuted since 2016. Details of fines imposed are shown below. A more recent Official Information Act request shows that 32 charges relating to asbestos were laid between 1st January 2017 and 12th August 2022. The status of these (withdrawn, not yet heard, etc.) is not known.

Figure 7: WorkSafe asbestos related charges laid

Number of prosecution charges laid relating to asbestos from 1 January 2017 to 12 August 2022

Year	Number of prosecution charges
2017	10
2018	8
2019	3
2020	4
2022	7
Total	32

Source: WorkSafe NZ prosecution register
Data extracted: 12/08/2022

Figure 8: Asbestos related prosecutions

Defendant	Legislation	Offence section	Penalties
	Health and Safety at Work (Asbestos) Regulations 2016	Reg 21(3)(b) and 21(5)(b)	Fine: \$10,000.00
	"Health and Safety at Work Act 2015 Health and Safety at Work (Asbestos) Regulations 2016"	Reg 17(1)	"Charges under s 36 of the Health and Safety at Work Act 2015 Fine: \$318,750.00"
	"Health and Safety at Work Act 2015 Health and Safety at Work (Asbestos) Regulations 2016"	"Reg 34(1) and 34(5)(a) of the Health and Safety at Work (Asbestos) Regulations 2016"	"Charges under ss 36 and 48 of the Health and Safety at Work Act 2015 Fine: \$35,000.00"
	Health and Safety at Work (Asbestos) Regulations 2016	"Reg 7(1) and 7(6)(b) of the Health and Safety at Work (Asbestos) Regulations 2016"	Fine: \$30,000.00
	"Health and Safety at Work Act 2015 Health and Safety at Work (Asbestos) Regulations 2016"	"Reg 56 and 56(2)(a) of the Health and Safety at Work (Asbestos) Regulations 2016"	"Charged under the Health and Safety at Work Act 2015 Fine: \$16,000.00"

By contrast, the HSE Asbestos Licensing Unit has extensive information on its website about its processes;³³ the form used to gather data for a decision includes a face-to-face interview with a director or senior manager, review of enforcement data, review of site inspections data, review of notifications submitted, incident report data, etc.³⁴ We understand such an interview process is also involved in applying for a licence in New South Wales and Victoria.

WorkSafe also provided information on supervisors being nominated on a removal licence. There is no restriction on a supervisor being named on more than one licence at the same time. In 2021, 192 existing supervisors applied to be nominated on a licence, but only 113 were removed from a licence.

WorkSafe confirm that supervisors have been named on up to six Class B licences in the period 2016-2022. This is perhaps an area for further discussion if the intention of the Regs is to ensure that the supervisor is not only familiar with the Regs and ACOP, but also the systems and processes of the company they are working for.

WorkSafe have developed an Asbestos Supervisor Practice Check Tool which comprehensively assesses how these important duty holders are performing. 69 such assessments have been carried out since 2018 resulting in a range of enforcement actions (Fig. 9), although the nature of the issues and concerns identified in these visits could not be provided.

Figure 9: Supervisor enforcement actions following practice checks³⁵

Practice Check All Enforcements

Enforcement	2016	2017	2018	2019	2020	2021
Directive Letter				2		3
HSWA Improvement Notice			4	2		1
HSWA Prohibition Notice					1	
Sustained Compliance Letter				1		2
Verbal Direction			1	1	1	

Certified Safety Management Systems

All Class A removalists are required to have a certified health and safety management system issued by a JAS-ANZ accredited certification body.

We spoke to one of the leading certification bodies who described their approach to initial certification and ongoing verification. They appeared to have a good degree of technical knowledge around working practices and legal requirements for work with asbestos to ensure that the system was specific to the type of work and not a generic one.

We reviewed an example audit report and found it to be comprehensive, involving a range of document reviews, site visits to removal jobs, and speaking to workers.

However not all certification bodies may be as thorough, and some removalists have been certified by overseas bodies who have mutual recognition with JASANZ.

WorkSafe state that they

engage with accredited bodies (i.e. JAS-ANZ or NATA) as and when necessary. WorkSafe provided inputs during the Regulations implementation programme to advise them of its requirements. The process sits now with them to oversee. In particular, monitoring the competency of accrediting bodies auditors as well as custody of accreditation scheme integrity is the remit of those accrediting bodies.

³³ <https://www.hse.gov.uk/asbestos/licensing/application.htm>

³⁴ <https://www.hse.gov.uk/asbestos/assets/docs/asb4.pdf>

³⁵ Source: WorkSafe response.

Given concerns in other areas about the performance of third-party accreditation and certification bodies,³⁶ it may be that WorkSafe should seek more formal evidence from JAS-ANZ and NATA on their monitoring arrangements given the critical role these systems play in ensuring Class A removalists have clearly articulated process for managing risks and are following them.

Training

Training for Class A and B workers and supervisors is specified by WorkSafe and must meet either NZQA Unit Standards or the Australian RTO equivalent. Data from NZQA indicates that, at September 2021, there were only seven Private Training Establishments (PTE) registered to deliver one or more of the Unit Standards associated with asbestos removal (29765-68). For the period 2017-2021, the numbers of people completing these courses was as follows:

29765 (Class B) – 1293

29766 (Class A) – 809

29767 (Supervisor) – 365

29768 (Assessment) – 12

These figures do not include those who obtained their qualification from or through Australian providers.

In some instances, the PTE holding the NZQA accreditation will use a sub-contractor to deliver the training.

We heard reports from a number of sources that the quality of some of the training was poor, with lecturers having little or no practical experience of the industry and teaching by rote (including providing model answers to the assessments to ensure

achievement). This is a challenge with all industry training of this sort as it provides little opportunity to verify the ability to turn theory into practice.

The Industry Training Organisations (ITOs) that used to have responsibility for the Unit Standards moderates the course materials and assessment but not the trainers. NZQA do periodic quality reviews of PTEs but will rarely assess an individual trainer/course unless there were complaints. NZQA report they have undertaken two investigations against one of the seven providers of asbestos training, but not in relation to these specific courses.

We observed parts of a Class A and B course delivered between a classroom and a mock-up of an asbestos work area. Whilst it provided correct information to the participants, in our opinion there is too much content to cover in one day, including a practical exercise. The Class B Unit Standard is at Level 4 with three Credits, and the Class A with four credits. The Supervisor Course is Level 5, two credits. For a number of those attending who may have only attained NCEA Level 1 or 2 and/or do not have English as a first language, the technical terms and concepts may be a significant step up from anything they have learnt previously. NZQA state that: *One credit represents a notional 10 hours of learning, practice, and assessment time.*³⁷ A Class A & B combined course should include 70 hours of content – instead of approximately 14.

We heard that cost was a major factor in training as it is a condition of entry to the industry, but some workers will not stay long once they have experienced what the work involves. This means that employers – and especially labour hire – will often look for the cheapest course available rather than the quality of the training. In some parts of the country, there may be very little choice of provider without extensive travel. All the courses we looked at were the same duration and similar cost.

³⁶ <https://www.mbie.govt.nz/business-and-employment/employment-and-skills/health-and-safety/independent-review-of-worksafe-in-relation-to-whakaariwhite-island/>

³⁷ <https://www.nzqa.govt.nz/providers-partners/assessment-and-moderation-of-standards/assessment-of-standards/generic-resources/unit-standard-definitions-and-explanations/>

WorkSafe state that they:

do not directly engage with training providers as monitoring performance of training providers is the responsibility and remit of NZQA. WorkSafe engage with NZQA as and when required and have in the past provided feedback around training content and delivery, however these will only be incorporated once the relevant Unit Standards (owned by NZQA) will be up for review which is a NZQA led initiative.

The Construction and Infrastructure Workforce Development Council (Waihanga Ara Rau) has just announced it is commencing a review of all the asbestos related Unit Standards in September 2022.³⁸

As with all Unit Standards, there is no requirement for refresher training and the ACOP does not require this. Some people may come and go from the industry; there may be changes in law and best practice, or simply a need to provide reminders of key points. In our view, on- and off-job training and workplace assessment of the maintenance of core skills should be an ongoing requirement given the critical importance of following correct protocols to ensure safety. We are unclear whether personal logbooks or training and assessment records are routinely held by removalists.

Competence, rather than attendance at training, should be the desired objective and hence removalists should have evidence of on-going workplace assessment of new entrants to determine the level of direct supervision they require. Periodic formal reassessment should also be required whenever internal systems and procedures or changes in standards (such as resulting from the review of the ACOP) occur.

Such processes should normally be in place as part of a Certified Health and Safety Management System.

³⁸ <https://www.waihangaararau.nz/for-industry/reviews-and-developments/review-of-asbestos-unit-standards/>

Asbestos Removal Control Plans (ARCP)

Hypothesis 4: The Asbestos Industry is now subject to more effective scrutiny over its performance and quality by contracting clients and their professional services advisors, licensed assessors and regulators, including as a result of the need to develop and be accountable for Asbestos Removal Control Plans.

The ARCP is essentially the safety plan for the asbestos removal project. It should identify the context (what, where, how much), the risks (both asbestos related and others such as work at height or confined spaces), the methodology (wet strip or wrap and cut), the site set up (size and location of negative pressure units (NPU), decontamination facilities, waste lock etc), specific work procedures (PPE requirements, equipment specification) and waste disposal arrangements.

In our experience and from industry feedback, the quality and usefulness of the ARCP can vary significantly. Instances were reported by clients of cut-and-paste ARCPs that included information from other jobs and were too generic to add much value. Many did not include full details from the survey as to exactly what ACMs were present and to be removed.

The ARCP is not usually required to be submitted to WorkSafe alongside the notification so is not used to determine whether a visit is required.

Only the largest clients formally peer-reviewed the ARCP. Many assessors are not engaged to review, approve or monitor adherence to the ARCP; instead they are responsible for the environmental monitoring and final clearance.

We think this is a missed opportunity as for many (especially Class A) removal jobs there will be no external oversight of the way in which the work is carried out by the client and hence if the controls are being used correctly. It is possible to do a poor job with significant worker exposures and still achieve a clearance at the end. Examples we heard of poor practices that could be addressed with greater oversight include:

- Wetting of lagging and other friable products very rarely done and not many Class A contractors having the equipment to do so.
- Incorrect selection and use of RPE (for example using a P2 half mask for friable work).
- Enclosures not fully sealed, or smoke tests not witnessed by the Licensed Asbestos Assessor.
- Not shadow vacuuming correctly.
- NPUs undersized or no calculations done.
- Not leaving NPUs running overnight or vented outside.³⁹
- Waste accumulating on the ground and not bagged as its produced.
- Bagged waste left outside the removal area but not in a locked skip.
- Inadequate and incorrect decontamination procedures.

This was probably the most common, with workers not fully changing and showering, and poor quality, undersized DCUs. The use of purpose-built mobile decontamination units (using transit arrangements where access is problematic) was reported on as being uncommon, especially compared to Australia and the UK.⁴⁰

³⁹ Note: this is not required by the ACOP but it good practice.

⁴⁰ The NZDAA has a Practice Note on this https://www.nzdaa.com/_files/ugd/6118dd_dff636870ad54b92aac6dbfe4f38ec8.pdf

Figure 10: Example of a purpose built decontamination unit



WorkSafe have undertaken over 10,000 assessments relating to asbestos work over the past five years. However, they do not collect or analyse this incredibly valuable data set in order to identify patterns and trends in industry practice and hence are unable to provide any meaningful insight into which parts of the whole system are working well or not.

In our view this is a significant regulatory failure given the importance of asbestos as a key priority for WorkSafe and means that there may be little evidential basis to support future changes to the regulatory standards or intervention strategies they adopt.

Exposure Monitoring

Hypothesis 5: There is objective evidence that asbestos workers are exposed to lower levels of asbestos fibres inside enclosures than prior to 2016.

Whilst the presence and effectiveness of individual controls such as negative pressure units and correct use of decontamination facilities can be monitored, the strongest evidence of effectiveness is the amount of airborne contaminant (respirable fibre) that a worker is exposed to whilst carrying out their work.

WorkSafe note:

Many work-related health conditions take years to develop, and it is often not possible to clinically establish whether a specific illness is work-related. However, research has established clear links between particular exposures and risks of longer-term ill health. Tracking exposures therefore gives us lead indicators that can show progress towards improved health outcomes.⁴¹

The evidence however is that personal exposure monitoring or static monitoring whilst carrying out work with asbestos – either in an enclosure or otherwise – is rarely happening, and there is no collation of data that can be used as a lead indicator of the risk of future disease. WorkSafe NZ refer to a NZ Carcinogens Survey the means by which they will assess exposures, however this survey has not yet been published and hence the methodology it uses cannot be verified as meaningful. We understand it is based on self-assessment by a sample of workers, but given the low level of asbestos awareness and the variability in practice, we are unclear how useful it will be.

The need for, and long-term value of such exposure monitoring for a variety of purposes is not well understood or clearly articulated in the various asbestos specific documents or through the licensing or assessment process.

WorkSafe's official view is reproduced in full as it is quite confusing:⁴²

A Prescribed Exposure Standard (PES) is a workplace exposure standard (WES) prescribed in regulations or a safe work instrument (noting there are no longer any WES under HSNO or group standards). There is no safe work instrument specifying a PES for asbestos. The airborne contamination standard in the Asbestos Regulations cannot be considered a WES, as:

- a. WES are applied to worker exposure monitoring (Workplace exposure standards and biological exposure indices | WorkSafe), and*
- b. Exposure monitoring means the measurement and evaluation of exposure experienced by a person. It may include monitoring the conditions of the workplace but fundamental is the exposure experienced by a worker i.e., their personal exposure to asbestos (which will vary as they do their job and move in, out of and around the contaminated space). The airborne contamination standard is applied to static monitoring not exposure monitoring Management and removal of asbestos | WorkSafe.*
- c. As such, there is no PES for asbestos, as there is asbestos WES in a Safe work Instrument or in Regulations.*
- d. Thus, the requirement of GRWM [General Risk and Workplace Management] to monitor in regard to PES does not apply to asbestos.*
- e. However, in terms of managing risk, the primary duty of care requires monitoring of the conditions at the workplace SFAIRP, for the purpose of preventing illness. 'Monitoring of the conditions at the workplace' is included within the definition of exposure monitoring.*

In summary: Although there is no PES requirement to monitor workers exposures to asbestos, the Primary Duty of Care requires monitoring for the purpose of preventing illness (SFAIRP).

⁴¹ <https://www.worksafe.govt.nz/dmsdocument/42250-te-tauaki-whakamaunga-atu-statement-of-intent-202122202425/latest>

⁴² From their senior occupational hygienist.

Figure 11: Extract fom WES Guidance

Asbestos (all forms)		0.1 asbestos fibres per millilitre of air, averaged over an 8-hour period		<p>confirmed carcinogen</p> <p>[Regulation 9(1) of the Health and Safety at Work (Asbestos) Regulations 2016 (the 'Asbestos Regulations') requires PCBUs with management or control of a workplace to ensure that exposure of a person at the workplace to airborne asbestos is eliminated so far as is reasonably practicable. If it is not reasonably practicable to eliminate exposure to airborne asbestos, exposure must be minimised so far as is reasonably practicable.</p> <p>Regulation 9(2) of the Asbestos Regulations requires PCBUs with management or control of a workplace to ensure that the airborne contamination standard for asbestos is not exceeded at the workplace (however, in relation to an asbestos removal area where class A asbestos removal work is being carried out, the regulations impose a more stringent standard).</p> <p>These requirements work together to ensure that there is a limit to the amount of asbestos that is permitted in the air of a workplace, without implying or meaning that the level delineates what is acceptable for personal exposure. Personal exposure must be eliminated or minimised so far as is reasonably practicable. The WES provided within this guide for asbestos must be applied accordingly.]</p>	2016
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We think this whole issue is confusing and poorly understood and hence rarely done; yet it is critical in terms of verification that the controls are effective in practice. We think that all parties in the asbestos system (industry bodies, WorkSafe NZ, licenced asbestos assessors and occupational hygienists) should raise awareness of the requirement for such monitoring as part of the general duty and consider how to share the results confidentially to help inform the WorkSafe NZ system performance measures.

Personal exposure monitoring is also important to determine the level of RPE that needs to be worn when undertaking particular types of work. The information in the ACOP and WorkSafe guidance is significantly out of date and not based on current evidence.⁴³ See, for example, the UK requirement (but note that this is from 2006).⁴⁴ More recent research from the HSE has identified potentially significant exposures are occurring even when workers know they are being observed and that exposures occur not just during the actual removal operation but also during preparatory works, dismantling of enclosures and handling waste.⁴⁵

The study notes that all workers were using full face positive pressure respiratory protective equipment which, if properly fitted, should give an assigned protection factor of 40. This is significantly lower than the 99.95 percent (200 times) protection figure quoted in the WorkSafe guidance. The WorkSafe guidance says a mask with a P3 filter should be worn for all licensed asbestos work but does not specify full face and positive pressure and we are aware that this is not common practice for many asbestos workers, some of whom use P2 half masks - especially for Class B work.

The other significant factors influencing personal exposures are reliance on negative pressure unit (NPU) to dilute fibres. Whilst correctly sized and installed NPUs will provide general dilution there is considerable evidence that shows that this is not uniform within an enclosure and that there can be dead spots and short circuits where air does not move uniformly throughout the space.⁴⁶ Coupled with dry stripping, overhead working and inadequate or absent shadow vacuuming can lead to significant localised exposures.

⁴³ <https://www.worksafe.govt.nz/assets/dmsassets/1/1007WKS-6-PPE-for-working-with-asbestos.pdf>

⁴⁴ <https://www.hse.gov.uk/pubns/priced/hsg247.pdf> Para 1.24 onwards.

⁴⁵ <https://www.hse.gov.uk/research/rrpdf/rr1176.pdf>

⁴⁶ <https://www.hse.gov.uk/research/rrpdf/rr988.pdf>

Figure 12: Confidential image provided by a respondent of licenced removal work involving limpet asbestos



Our biggest concern was the almost complete lack of exposure monitoring to validate controls effectiveness when compared to other hazards and industries (for example noise and dust/fume in a manufacturing operation). The fact that the operation is transient with temporary controls would seem to suggest that more, rather than less monitoring should be undertaken. New types of real time asbestos monitors, whilst not suitable or approved for definitive testing and verification, may offer a quicker and easier alternative to conventional personal sampling.⁴⁷

ILO Convention 162

New Zealand has not ratified ILO Convention 162 on Asbestos which includes Article 20 (see below).⁴⁸

Given that health and safety has recently been deemed a basic human right by the ILO we consider ratification of this convention and improving surveillance of asbestos exposures for the most exposed population should be clearly mandated.

Figure 13: Article 20 of ILO Convention 162

PART IV. SURVEILLANCE OF THE WORKING ENVIRONMENT AND WORKERS' HEALTH

Article 20

1. Where it is necessary for the protection of the health of workers, the employer shall measure the concentrations of airborne asbestos dust in workplaces, and shall monitor the exposure of workers to asbestos at intervals and using methods specified by the competent authority.
2. The records of the monitoring of the working environment and of the exposure of workers to asbestos shall be kept for a period prescribed by the competent authority.
3. The workers concerned, their representatives and the inspection services shall have access to these records.
4. The workers or their representatives shall have the right to request the monitoring of the working environment and to appeal to the competent authority concerning the results of the monitoring.

⁴⁷ <https://www.alerttechnologyltd.com/wp-content/uploads/2018/09/ALERT-PRO-1000-Brochure-Aug-19-Edition.pdf>

⁴⁸ https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312307

The convention is over 35 years old and likely in need of updating, but by not ratifying it New Zealand could be perceived to be out of alignment with international expectations. Australia ratified this convention in 2011.

In order to build up a lifetime exposure record for epidemiological purposes, it would be ideal to have a central database which stays with the worker throughout their career in the asbestos industry. A similar methodology is used for radiation exposures. This would also be where results of health and exposure monitoring are kept so that they do not stay with the individual provider or employer as workers move around. Current health reforms and the creation of Health NZ potentially provide an opportunity to socialise such an idea with the support of the medical specialists involved, although achievement of this for both asbestos and other occupational health records is likely to be a long way away.

Asbestos Exposure Register and Asbestos Medical Panel

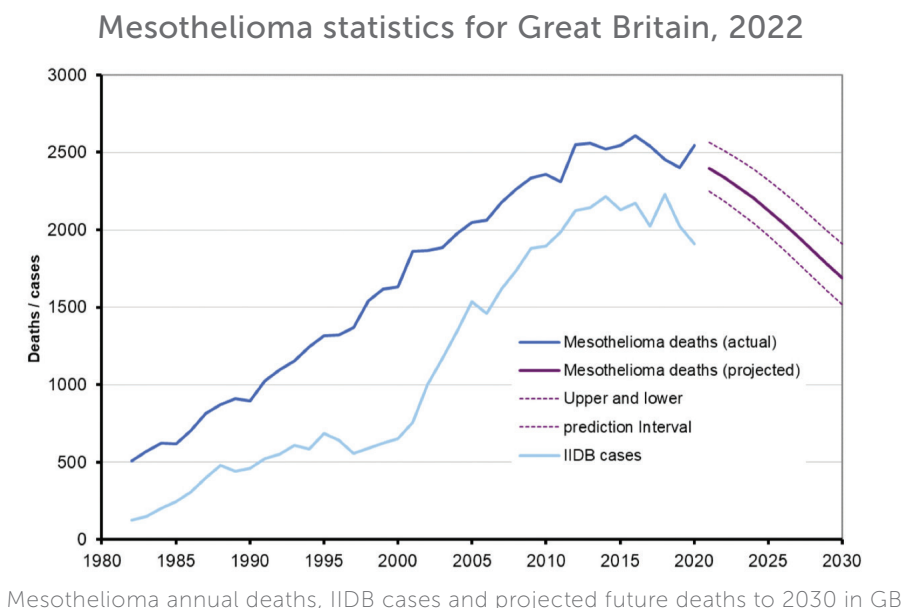
The Asbestos Exposure Register was established by the Department of Labour several decades ago but has fallen into disuse through a lack of interest from WorkSafe NZ since Dr Bill Glass retired. Even

before then, it was a constant struggle to get sufficient resources to do anything with the data. We understand that the Register has recently been updated so all records submitted to WorkSafe are now in the database, but there is little analytical capability to make use of the information they contain.

When Occupational Health Nurses were employed by the Department, there was a process of taking detailed histories that enabled some assessment of exposure duration and scale to be made and to use this for epidemiologic purposes. However, as these records did not link to any actual exposure monitoring or results of health surveillance, they were of limited value.

The Asbestos Medical Panel of experienced Occupational Health and Respiratory Specialists used to assess cases referred to them to make an assessment as to whether they were asbestos related, and to then use this data to create the Annual Report giving some longitudinal analysis of diseases prevalence. The last Annual Report was published in 2013, so historical disease trend data is not being published routinely. This contrasts with both the UK and Australia who publish such reports annually.⁴⁹

Figure 14: UK mesothelioma death data



⁴⁹ <https://www.hse.gov.uk/statistics/causdis/mesothelioma/mesothelioma.pdf>
<https://www.cancer australia.gov.au/cancer-types/mesothelioma-cancer/statistics>

The current Occupational Physician in WorkSafe is keen to rejuvenate the Register and the role of WorkSafe in better understanding the patterns of disease, however as a voluntary register and with ACC data so narrow, its value seems to be limited. The recent UK House of Commons Enquiry heard that relating asbestos deaths to occupation was confounded by how official statistics are compiled and the latency period between exposure and diagnosis or death. Hence many records show occupation as retired or their last job – not that someone was a plumber or teacher earlier in their working life.

The issues with the Register and health surveillance records for a range of occupational health conditions (noise, solvents, silica, etc.) are similar and reflect a general lack of value being given to health-related harm, despite widespread recognition that workers are 18 times more likely to die prematurely from an occupational disease than acute accident. In our view, this issue needs much great focus – but that asbestos should be the initial target given its importance as the single biggest cause of work-related cancer and death.

Health surveillance

The requirements for health monitoring for asbestos workers are set out in the ACOP (Section 16). The provider of this service is only required to be *an occupational health practitioner with experience in health monitoring*. This could be an occupational health nurse. Previously the provider needed to be a *qualified medical practitioners with specialist qualifications in occupational or respiratory medicine and experience in asbestos-related diseases and conditions*.⁵⁰

It is not clear why this was changed as selecting the right surveillance methods to detect changes in lung function that might be indicative of asbestos related disease requires a high degree of specialist expertise and is different to other more standardised screening processes.

Given the high turnover of labour in the industry the need for continuity of health records for long term surveillance is paramount. Equally important is that surveillance should continue after work with asbestos has ceased. The current requirement only applies to the employer of the asbestos worker and the records are kept by the employer rather than staying with the worker. There is currently no mechanism to enable workers to access ongoing monitoring for any condition either through a GP or publicly funded Occupational Health Service. The only available route would be once disease has occurred and either an ACC claim has been made or a GP referral is made for screening. For many asbestos-related diseases, the opportunity for early diagnosis and treatment may well have been lost.

It is beyond the scope of this report to try and resolve a long-standing deficiency in our public health system, however the creation of Health NZ and Māori Health NZ may offer some longer-term options – especially given the likely over-representation of Māori in occupational health related harm.

As noted earlier a good indicator of commitment would be for New Zealand to belatedly ratify the ILO Asbestos Convention.

⁵⁰ *Interim guidance for work involving asbestos March 2015.*

WorkSafe inspection activity

Hypothesis 7: The percentage of failed clearances and exceedance of exposure standards confirms that the majority of asbestos removal projects are meeting requirements.

WorkSafe have carried out over 10,000 assessments relating to asbestos removal work since 2016 against 60,000 notifications and an unknown number of complaints or other triggers.⁵¹

This appears to be a high response rate although we are unclear what constitutes an assessment in this regard. For example, in 2020 and 2021 during COVID when WorkSafe were frequently not visiting sites, they still carried out around an average of 130 asbestos assessments per month.

The table below shows the reported breakdown.

Figure 15: Trigger for WorkSafe Asbestos Assessment

Type	2016	2017	2018	2019	2020	2021
Proactive Assessment	1,831	1,585	1,036	1,071	941	561
Reactive - Notification of Exceedance	13	20	14	26	20	14
Reactive - Other	1,818	1,565	1,022	1,022	921	547

Regional variations are significant, with Auckland comprising over 50 percent (7,525) of all assessments but having 33 percent of the notifications. Canterbury had 15 percent of the notifications and 10 percent (1,008) of the assessments. Approximately two thirds are Class B (41,405) and one third are Class A (18,695).

We asked WorkSafe *Is data used strategically to look at how well the system is working or only captured against an individual PCBU? WorkSafe's response was that WorkSafe does not use Guardian (or other WorkSafe) data to: "look at how well the system is working." The Guardian data is used to help assess risk against individual PCBUs.*

Again, this is a surprising result, as it might be expected that the regulator would want to take a system-level view of one of its most important priority areas. This transactional approach seems very incomplete for a regulator. We understand that WorkSafe's new IT systems may be configured to enable more insights to be drawn from this kind of data, however we did not get a strong sense that the value of this intelligence-led approach was widely recognised.

There were 615 notifications to WorkSafe covering Concerns (complaints), Asbestos Emergency Procedures (Reg 23). Notifiable incidents (HSWA s24) or Fibre levels exceeding the limit (Reg 45).

In the same period, a total of 1,525 Improvement (833), Prohibition (639) and Infringement Notices (11) were issued. We are unable to state now many of these Notices relate to licenced and notified asbestos removal work and hence what the rate of Notices per assessment is.

Clearance Testing and Asbestos Assessors

Class A removal work requires a licenced asbestos assessor (LAA) to issue a clearance certificate on completion of the job and before the enclosure can be dismantled and the area handed back for other activities to take place.

As noted earlier, there are 318 LAAs on the Register performing a vital role in verifying that removal work has been completed correctly and the area is safe. Yet WorkSafe only record four assessments of LAAs since 2016.

We asked about licence actions in relation to LAAs and were told:

From our records there have not been any cancellations. We do not withdraw assessor licences but have issued four immediate suspensions to assessors. All four of these were reinstated, and conditions imposed on one. Between 2021 and April 2022 10 licences were suspended

⁵¹ Source OIA request- data to Aug 2021.

- *3 have been lifted when regulations have been met.*
- *1 suspension has been lifted with conditions imposed.*

We heard that it is still common for removal contractors to recommend which assessor to use or in some cases (for example with small builders) just to tell the client who the assessor will be. We saw examples of many different standards of clearance certificates. Some are highly detailed with checklists and photos, or each area and item verified; others were just a simple certificate with copies of any air monitoring results. Often the exact scope of work and any exclusions was not clearly articulated. Failures to be exact in this regard can lead to subsequent claims of inadequate clearance when other works subsequently decontaminate a clean area.

There are differences of opinion by assessors as to how to apply potentially conflicting information -for example, a positive swab test on a rough surface but a clear air test, also about the method and extent of disturbed air monitoring to simulate re-occupation. We think there is a role for FAMANZ to work with the LAA community to issue good practice guides covering these detailed technical areas.

Class B work does not require an LAA but must be checked by an independent competent person. In some instances, this will be an LAA. In our view given the large pool of LAAs it may be appropriate to strongly recommend, if not mandate that all clearance work is done by an LAA given the importance of ensuring other workers are not exposed to risk. The level of work required to clear a small Class B job may not be significant, and hence using an LAA should not impose extra cost., but provides greater assurance

The LAA does not currently have a role in verifying that all asbestos waste has been safely disposed of and that tip dockets are reconciled with the amount leaving site. If LAAs are to be given a larger role in overseeing asbestos removal jobs from start to finish (and especially Class A), then this aspect should be included in their scope of work to reduce the risk of fly tipping or unlicensed disposal (especially given the costs involved in legal disposal).

Asbestos Waste Transport and Disposal

Hypothesis 8: The transport and disposal of asbestos waste is carried out predominantly by transporters using drivers who hold Dangerous Goods license endorsements and in vehicles that have Dangerous Goods declarations and placarding of the transport vehicle (Section 156 Land Transport Act 1998).

Hypothesis 9: Practices within landfills and facilities that accept asbestos waste have improved as a result of the changes that occurred in 2016.

There is confusion in the industry as to whether the transport of asbestos waste is subject to the Land Transport Rule Dangerous Goods 2005. The official position from NZTA (Waka Kotahi) is as follows:

“Where a load of ACM is consigned and packaged in accordance with the ACoP – the ACM itself, then ceases to be a DG [dangerous goods] for transport. Generally speaking, because a person is required to comply with the ACoP, which in part provides packaging standards and where that ACM packaging standard has been met, that load of ACM ceases to be a DG for transport.

If an article or substance is not DG for transport, the relevant requirements in the Land Transport Rule Dangerous Goods 2005, e.g., placarding, D-endorsement, documentation etc are not required.”⁵²

Whilst the ACOP is clear about how to package and label bags or bins of asbestos waste, it is less clear about whole skips or trays. Section 18.2.5 refers to lining the tray and sealing the waste, but does not require labelling or placarding of the vehicle. This means that if a truck load of asbestos waste were to crash, it might not be immediately apparent to first responders what the material contains and hence how they should respond.

Following the ACOP may mean the DG Rules don't apply but the protections offered by DG labelling should still be applicable to asbestos waste, in our opinion. DGs are labelled on the vehicle to warn others and include an emergency contact number for advice if there has been an accident or spillage. Most DGs will also require the driver to have a Transport Emergency Card or similar that can be provided to others advising them of the risks and how to manage them.

Figure 16: Example from Australia⁵³



⁵² Email 11/2/22 from Dwain Hobbs, Principal Advisor Dangerous Goods, Systems Integrity, NZTA.

⁵³ <https://www.mcmservices.com.au/services/asbestos-waste-collection-services/>

Tracking of asbestos waste is supposed to be covered in an asbestos waste disposal plan as part of the ARCP. According to the ACOP, this should describe:

- the name of the asbestos waste transporter;
- how the waste is contained;
- the quantity (amount and dimensions) of waste;
- where the waste will be stored on-site before disposal;
- how the waste will be transported;
- approval requirements from the local or territorial authority (including any permits and paperwork required);
- local or territorial authority requirements such as the quantity of asbestos and dimensions of containers;
- where the waste will be transported to; and
- how correct disposal shall be verified, such as tip dockets.

The information we were provided with suggests that the tracking part of this requirement is not well complied with and whilst tip dockets are provided for all disposals, there is rarely a verification process to ensure all the waste produced is accounted for in an auditable manner. Only one client described having carried out such a waste audit.

One interview reported seeing waste disposal information in New Zealand that was simply copied and pasted and included reference to disposal in Australia.

The transport and safe disposal of asbestos waste is the vital last step in the removal process. Currently all disposal is to designated landfill, although efforts are underway internationally to find alternatives that involve heat, chemicals or biological agents to break down and denature asbestos fibres.

Waste disposal sites are regulated by regional and unitary authorities under the RMA and are either local council or privately owned and operated. Currently there is no register of disposal sites that will accept different types of asbestos waste and under what conditions, making it difficult for those trying to dispose of waste responsibly to find out how and where to do so

The Regs have limited applicability and relevance to waste disposal other than making transport and disposal a permitted activity (Reg 7(2)(b)) and requiring waste to be disposed of at an approved place (Reg 53). PCBUs operating waste transport and disposal facilities and their workers are not subject to licensing under the Regs but have to meet the general duties in Parts 2 and 5 of the Regs as well as the general duties under HSWA.

Feedback from those in the industry suggests that practice is generally good when using reputable operators. However, the high cost of disposal and the challenges of access for those generating small amounts of waste (DIY or <10m² work) mean that illegal disposal is not uncommon either through the general waste stream or dumping/burying.

As most waste transfer stations do not accept asbestos waste (unlike other dangerous goods), and licenced disposal sites mostly will not accept waste from the public or in small quantities, there is a potential gap. Some skip hire companies provide a disposal service using specialist Hazibags.⁵⁴ It is understood that some small builders have informal arrangements with licenced contractors to dispose of small quantities of non-friable asbestos waste on their behalf.

⁵⁴ See for example <https://pinkbins.co.nz/hazibags/>

Our experience of inspecting a number of waste transfer stations is that the monitoring of general construction waste for the presence of ACMs is quite hit and miss, and tip staff are often either unable or unwilling to challenge customers who might (knowingly or unknowingly) be trying to dump them. Awareness training and processes for dealing with suspect materials are often weak.

One large tip operator described comprehensive policies and practices they have in place to control asbestos waste including verification through swab testing of machine cabs, personal and environmental monitoring. Personal experience from a number of years ago at one tip suggests that practices are not always as good as this.

Figure 17: Poorly controlled asbestos waste at licenced tip (author's own photo approx 2015)



There is no easy means of gathering information about enforcement of the RMA for illegal dumping or breaching consents or on WorkSafe's activities with tips as the sector is not identified in the data set provided.

WasteMINZ has issued waste industry guidelines to manage the collection, receipt, transport and disposal of asbestos waste,⁵⁵ and the NZDAA has a practice note on waste disposal.⁵⁶

⁵⁵ <https://www.wasteminz.org.nz/wp-content/uploads/2019/01/Waste-industry-guidelines-managing-asbestos-18Dec18-final.pdf>

⁵⁶ https://www.nzdaa.com/_files/ugd/6118dd_80fdb3df93ff468a890032a3f150c42a.pdf

CONCLUSION

The conclusion from this review is that the management of asbestos has improved over the past 5 years, but that the system as a whole is still sub-optimal and has a number of opportunities for improvement.

Competence at all levels is a key concern. Basic training for removal workers in accordance with the NZQA unit standards is too focused on legal and technical issues, and is too short to enable those new to the industry to properly demonstrate assimilation of the key steps they need to undertake to keep themselves and others safe. There is little if any external oversight of the training and those delivering it.

Asbestos surveyors have a crucial role in identifying and determining the risk from ACMs. Yet there are only recommended competency standards, and no independent verification of competence in order to provide clients – many of whom are inexperienced in this area – with reassurance they are engaging the right people. The quality and value of surveys varies widely as a result.

Removalists, their supervisors, and licenced assessors are subject to vetting by WorkSafe, but this is largely a paper-based exercise. There is no evidence available about how effective WorkSafe are in their surveillance of practice, and what they are finding as the data is not analysed in any strategic manner. A large number of enforcement notices have been served but relatively few licences have been withdrawn or declined as a result.

Some larger clients have helped raise the quality of those they work with, but several report that they believe this will only have an effect as long as they maintain a high degree of oversight and continue to put pressure on their suppliers to perform to the required standard.

There is almost no exposure monitoring taking place to verify the effectiveness of controls inside the enclosure and to determine if the level of RPE is adequate. In our view this is a significant gap in the system which may need legislative change or clarification to address. The standard of RPE in many cases is below what we would expect to see to provide the highest level of protection against harm.⁵⁷

Health monitoring standards are not as high as they have been (in terms of who can carry them out); records are not generally kept with the worker or their GP; and, given the relatively high movement of workers between employers and out of the industry, the required long term health surveillance is not happening in order to support early diagnosis and treatment.

We suspect that decontamination arrangements are inadequate and not followed as robustly as is required to prevent personal clothing being contaminated. We heard of undersized, temporary DCUs with either a garden spray bottle or cold-water hose as being quite common. We suspect full changes of clothes and whole-body showers are the exception. Rarely are purpose-designed DCUs used, compared to other developed countries.

Waste disposal is problematic in some parts of New Zealand, and especially for those undertaking unlicensed work or generating small quantities of waste. Labelling requirements for transport vehicles is unclear, and asbestos waste is not treated as a dangerous good for transport.

There are gaps and overlaps between government departments and agencies, with no one having overall responsibility for policy on this multi-dimensional issue.

In summary we think all those who are part of the asbestos industry need to work together more cohesively to deliver better and more consistent standards. WorkSafe as the lead agency for work-related asbestos issues needs to take a central role but all the other parts of the ecosystem need to be engaged.

The proposed revision of the ACOP provides an opportunity for this to happen over the next few months. Certainly, many of those spoken to as part of this review are keen for change and to be involved in it, so the interest is there.

Giving the workers in the industry a voice is the biggest challenge we see, given their lack of representation and mobility. This is a critical issue if those at risk are to have a degree of self-determination in making their workplaces safer and healthier.

We would like to thank all those who freely gave of their time and views throughout this review. All views expressed in the report are the authors summation of their input and should not be attributed to any individual or organisation unless the source is cited. We hope that this report can go some way towards reducing the harm that asbestos continues to inflict on so many.

⁵⁷ The standard set in the purpose statement of HSWA

APPENDIX 1: Interviewees

- Rob Birse, WorkSafe NZ
- Catherine Epps, WorkSafe NZ
- Rob Barton, VP NZDAA, ACM Removals Ltd (Removal Co)
- Carl King/ Chris Lobb, EnviroNZ Ltd (Waste Co)
- Bob White, MBIE
- Luke Austin, Ladra (Assessor, Consultant)
- Terry Coleman, Coleman Consulting (Assessor, Consultant)
- Bridgette Jennings, Chair of FAMANZ and CEO, ChemSafety (Assessor, Laboratory, Occ. Hygienist)
- Dr James McLeod, WorkSafe NZ (Occupational Physician)
- Matt Mason, CEO, Betta Group (Surveyor Co)
- Troy Aschenbrock, Wayne, Central Demolition Ltd (Removal Co)
- Kate Brooks, Asbestos Manager CDHB (Consultant, Assessor)
- Philippa Gibson, WorkSafe NZ (Occupational Hygienist)
- Andrew Wills, Technical Manager Telarc (Certification Body)
- Tomas Haweara, Link Safety Consultant and former asbestos worker
- Hal Tapley, Mark Quigley and Peter Kingsbury, ICP Consultants Ltd (Surveyor/Assessor)
- John Kerr, Safety 1st Consultants (Removalists)
- Alannah Elliott, SQN Consulting Ltd (Trainer) Part of NZQA Class A/B training observed.
- Jason Braithwaite, Owner, BeSafe Training Ltd (Private Training Establishment)
- Jason Milner Asbestos Manager Waitemata DHB and FAMANZ Board Member (Consultant, Assessor)
- James Mead, Group Manager Education, Development and Delivery SiteSafe NZ (correspondence only)
- Peter Ward, Ward Demolition (Removalist)
- Jon Charles, Alpha Demolition (Removalist)
- Luke Daly, Advanced Environmental Services Ltd (Removalist)
- Keith Rowden, Morecroft Contractors (Removalist)
- John Kendall, COMEX (removalist)
- Mike Mechaelis, Tonkin and Taylor (Contaminated land)
- Dr Geraint Emrys, (Occupational Physician) AFOEM
- Dr Mary Obele, (Occupational Physician)
- Jon Harper-Slade, CHASNZ
- James Corbett, Auckland Council
- Nikki Edge, Occupational Health Nurses Association
- Rob McAllister, FAMANZ, Ministry of Education (Client, assessor)
- Matt Stowe SES Ltd (Removalist)

APPENDIX 2: Enforcement Data⁵⁸

Enforcement Data

Act or Regulation	Section of the Act or Regulation	Duty	Number	Total for the Reg
Health and Safety at Work (Asbestos) Regulations 2016	7(1)	Prohibited work	28	
Health and Safety at Work (Asbestos) Regulations 2016	9(1)	Exposure to asbestos	5	7
Health and Safety at Work (Asbestos) Regulations 2016	9(2)		2	87
Health and Safety at Work (Asbestos) Regulations 2016	10(1)	Identify asbestos	78	
Health and Safety at Work (Asbestos) Regulations 2016	10(2)		9	
Health and Safety at Work (Asbestos) Regulations 2016	11(2)	Analyse asbestos	3	
Health and Safety at Work (Asbestos) Regulations 2016	12(1)	Indicate presence of asbestos	7	60
Health and Safety at Work (Asbestos) Regulations 2016	13(2)	Prepare AMP	34	
Health and Safety at Work (Asbestos) Regulations 2016	13(3)		14	
Health and Safety at Work (Asbestos) Regulations 2016	13(5)		12	
Health and Safety at Work (Asbestos) Regulations 2016	15(1)	Health monitoring	3	
Health and Safety at Work (Asbestos) Regulations 2016	16(1)	Health monitoring	2	26
Health and Safety at Work (Asbestos) Regulations 2016	17(1)	Train workers	23	
Health and Safety at Work (Asbestos) Regulations 2016	17(3)		2	
Health and Safety at Work (Asbestos) Regulations 2016	17(4)		1	14
Health and Safety at Work (Asbestos) Regulations 2016	18(1)	Limit use of equipment	9	
Health and Safety at Work (Asbestos) Regulations 2016	18(3)		5	66
Health and Safety at Work (Asbestos) Regulations 2016	20(2)	Determine presence of asbestos	53	
Health and Safety at Work (Asbestos) Regulations 2016	20(3)		9	
Health and Safety at Work (Asbestos) Regulations 2016	20(5)		4	
Health and Safety at Work (Asbestos) Regulations 2016	21(3)	Identify asbestos before demolition	13	
Health and Safety at Work (Asbestos) Regulations 2016	22(1)	Identify and remove from home	19	
Health and Safety at Work (Asbestos) Regulations 2016	25(3)	Identify and remove from refurb	18	
Health and Safety at Work (Asbestos) Regulations 2016	26(1)	Identify and remove from refurb of a home	35	
Health and Safety at Work (Asbestos) Regulations 2016	27(1)	Removalist is licensed	13	
Health and Safety at Work (Asbestos) Regulations 2016	28(1)	Nominated supervisor present	9	
Health and Safety at Work (Asbestos) Regulations 2016	29(1)	Removal worker trained	3	6
Health and Safety at Work (Asbestos) Regulations 2016	29(3)		3	
Health and Safety at Work (Asbestos) Regulations 2016	31(1)	Give information about health risks	2	
Health and Safety at Work (Asbestos) Regulations 2016	32(1)	Prepare ARCP	16	19
Health and Safety at Work (Asbestos) Regulations 2016	32(3)		3	
Health and Safety at Work (Asbestos) Regulations 2016	33(1)	ARCP available	1	11
Health and Safety at Work (Asbestos) Regulations 2016	33(3)		10	
Health and Safety at Work (Asbestos) Regulations 2016	34(1)	Notify WorkSafe	24	
Health and Safety at Work (Asbestos) Regulations 2016	36(3)	Inform other persons	1	5
Health and Safety at Work (Asbestos) Regulations 2016	36(3)		4	
Health and Safety at Work (Asbestos) Regulations 2016	37(1)	Signs and barriers	9	
Health and Safety at Work (Asbestos) Regulations 2016	38(2)	Limit access	4	5
Health and Safety at Work (Asbestos) Regulations 2016	38(5)		1	
Health and Safety at Work (Asbestos) Regulations 2016	39(1)	Decon available	6	
Health and Safety at Work (Asbestos) Regulations 2016	40(1)	Disposal of waste	6	
Health and Safety at Work (Asbestos) Regulations 2016	41(2)	Clearance inspection	11	
Health and Safety at Work (Asbestos) Regulations 2016	42(2)	Clearance certificate	7	10
Health and Safety at Work (Asbestos) Regulations 2016	42(3)		3	
Health and Safety at Work (Asbestos) Regulations 2016	46(1)	Removal of friable asbestos	1	2
Health and Safety at Work (Asbestos) Regulations 2016	46(2)		1	
Health and Safety at Work (Asbestos) Regulations 2016	50(1)	Keep work area separated	1	
Health and Safety at Work (Asbestos) Regulations 2016	52(1)	Decon Available	4	
Health and Safety at Work (Asbestos) Regulations 2016	53(1)	Disposal of waste	1	
Health and Safety at Work (Asbestos) Regulations 2016	54(1)	Hold A Class license	5	
Health and Safety at Work (Asbestos) Regulations 2016	56(1)	Duty to hold B Class license	3	5
Health and Safety at Work (Asbestos) Regulations 2016	56(2)		2	

APPENDIX 2: Enforcement Data⁵⁸

(Continued)

Continued

Act or Regulation	Section of the Act or Regulation	Duty	Number	Total for the Reg
Health and Safety at Work (GRWM) Regulations 2016	11(2)	Provide workplace facilities	1	
Health and Safety at Work (GRWM) Regulations 2016	13(2)	First aid	2	
Health and Safety at Work (GRWM) Regulations 2016	15(2)	Provide PPE	1	
Health and Safety at Work (GRWM) Regulations 2016	17(1)	PPE	4	
Health and Safety at Work (GRWM) Regulations 2016	17(2)		1	
Health and Safety at Work (GRWM) Regulations 2016	18(2)	Wear PPE	5	
Health and Safety at Work (GRWM) Regulations 2016	19(1)	Ensure Ppe is worn	1	
Health and Safety at Work (GRWM) Regulations 2016	28(1)	Managing risk with hazardous substances	4	
Health and Safety at Work (GRWM) Regulations 2016	31(1)	Health monitoring	1	
Health and Safety at Work (GRWM) Regulations 2016	32(1)	Exposure monitoring	1	
Health and Safety at Work Act 2015	34(1)	Consult with other PCBUs	20	
Health and Safety at Work Act 2015	36(1)(a)	Primary duty of care	742	1033
Health and Safety at Work Act 2015	36(1)(b)		133	
Health and Safety at Work Act 2015	36(2)		158	
Health and Safety at Work Act 2015	36(6)		3	
Health and Safety at Work Act 2015	37(1)	PCBU who manages plant	5	
Health and Safety at Work Act 2015	45	Duty of workers	1	
Health and Safety at Work Act 2015	55(1)	Duty to preserve scene	1	
Health and Safety at Work Act 2015	56(1)	Duty to notify events	1	
Health and Safety at Work Act 2015	204(1)	Authorisation of workplaces	1	
Health and Safety at Work Act 2015	206(1)	Authorisation of plant	3	5
Health and Safety at Work Act 2015	206(2)		2	
Health and Safety at Work Act 2015	207(1)	Prescribed qualifications	1	
Health and Safety at Work Act 2015	208(1)	Comply with conditions of authorisation	1	
			TOTAL	1361

Non Prosecution Enforcement Notices issues related to asbestos from 1 January 2017 to 18 August 2022

Updated Enforcement data 18th August 2022

Type	2017	2018	2019	2020	2021	2022	Total
Directive Letter		70	63	68	68	18	306
HSWA Improvement Notice	152	122	234	121	121	82	868
HSWA Infringement Notice	8	3	7	5	5	1	26
HSWA Non-Disturbance Notice	1	83	102	25	25	25	285
HSWA Prohibition Notice	104	110	168	85	85	45	626
HSWA Compliance Letter		17	31	24	24	4	94
Verbal Direction		32	37	31	31	9	150
Total	256	437	642	468	359	184	2355

Source: WorkSafe NZ Case Management System
Note: data extracted based on key word search.

Date Extracted: 19/08/2022

⁵⁸ Source WorkSafe NZ. Enforcement Notices relating to asbestos 2016-2021. Chart shows references to individual duties so is higher than the number of actual Notices (975). Notices issued under the Health and Safety in Employment Act (47) have been omitted.

APPENDIX 3: WorkSafe NZ Summary of its Asbestos Programme

Re NZDAA request for work carried out since asbestos regulations implemented.

When the regulations were implemented, WorkSafe:

- Met with NZDAA during roll out of the new HSWA Act and Asbestos Regulations;
- Held roadshow meetings with industry;
- Encouraged NZDAA set up a group to monitor surveyors and assessors (2017); and
- Created principal roll in 2018 that sits in Technical Programs and Support.

Strategic objectives

Committed to reducing work related diseases and ill health

- Fewer people experience work related ill health
- Work related health inequalities are reduced

What is WorkSafe doing

- Developing a surveillance program
- Building capability and capacity in the wider work-related health professions
- Delivering interventions in our key focus areas
- Engaging with key stakeholders and aligning activity across Government and the wider health and safety system

Working links with Australia

- Asbestos Safety and Eradication Agency (ASEA)
- Australasian Land and Groundwater Association (ALGA)
- Heads of Workplace Safety Authority (HWSA) keeping asbestos out of the country

Working with central and local Government on matters involving asbestos

- Engaging with govt and public sector
- Developed and implemented the asbestos liaison protocol with LTAs dealing with emergency events involving asbestos addresses dealing with climate change and fires
- Presented on asbestos at the MBIE Govt learning hour webinar
- Met with Govt and Local stakeholders and started looking at management of asbestos in the govt and local govt sectors
- Identified that asbestos management and PCBU duties as topics
- Developed an online AMP that covered the regulatory requirements
- Presented to Building officers institute of NZ (BOINZ)
- Met with several major govt estate owners and reviewed their processes.
- Started the round table group of several Govt agencies- workshop held and ongoing workshops planned
- Held the public sector conference in asbestos management – Minister Woods spoke of the need for Govt estate managers to manage asbestos
 - Focused on AMPs
 - Choosing a consultant
 - Performance of contractors
 - Recommend asbestos awareness training for contractors

APPENDIX 3: WorkSafe NZ Summary of its Asbestos Programme (Continued)

Working with Industry

- Met with industry groups: FAMANZ, ALGA, ASEA, NZDAA
- Presented to NZ landlord: investor groups, property managers association
- National roadshows with the General Inspectorate on construction and asbestos to trade people
- Developed Landlords guidance on duties involving asbestos management in rental properties
- Supported engagement with wider asbestos groups – FAMANZ, ALGA, WasteMINZ – on contaminated soils
- Encouraged FAMANZ to join HASNZ – this is occurring
- Building an asbestos network – this is ongoing

Health program

- Carcinogens and airborne risks programme of work a priority for the next three years, includes a focus on asbestos.
- Roadshows across the country planned for Spring 2022 as part of the Carcinogens and airborne risks programme. Aimed at supporting businesses to improve management of risks including asbestos.

Other Work

- Reviewing guidance to replace WorkSafe's ACOPs with assessor guide- asbestos related work guide, asbestos removal guide, along with other pieces
- Developing a downloadable ARCP

Looking ahead (general topics)

- Asbestos surveying- lifting the bar on acceptable surveys to align with WS guidance
- Impact of labour shortage in construction industry in general and the labour pool that can work in asbestos removal
- Asbestos safety awareness week, November 2022
- Concerns about the fragmented supply chain particularly from Asia to monitor asbestos containing product getting into NZ
- Training initiatives to get people into work
- Proposed Assessor audits
- Stakeholders influence in the DIY sector
- Impact of Covid and other variations of Covid (e.g. under various traffic light settings).

APPENDIX 4: ACC asbestos claim data

Table 9: Number of active claims for work-related gradual process claims related to asbestos, by year of activity and client age and gender

Gradual process injury of disease type	Gender	Age	2017/18	2018/19	2019/20	2020/21
Asbestosis/Silicosis	F	65 to 69		<4	<4	<4
		70 to 74	<4	<4	<4	
	M	30 to 34			<4	<4
		35 to 39	<4	<4	<4	<4
		40 to 44	<4	<4	<4	<4
		45 to 49	<4	<4	<4	5
		50 to 54	7	6	5	5
		55 to 59	13	11	8	7
		60 to 64	13	13	10	12
		65 to 69	24	16	14	22
		70 to 74	37	32	33	26
		75 to 79	33	30	27	35
		80 to 84	18	18	17	14
		85 to 89	11	6	8	8
90 to 94	<4	<4	<4	<4		
Lung Cancer/Mesothelioma-asbestos	F	50 to 54	<4			
		55 to 59	<4	<4	<4	<4
		60 to 64		<4	<4	<4
		70 to 74	<4	<4	<4	
		75 to 79				<4
	M	85 to 89				
		30 to 34	<4	<4	<4	<4
		35 to 39			<4	<4
		45 to 49	5	5	5	4
		50 to 54	5	7	8	5
		55 to 59	11	12	13	13
		60 to 64	32	29	26	27
		65 to 69	33	34	26	21
		70 to 74	30	29	25	32
		75 to 79	32	34	29	28
80 to 84	18	13	12	15		
85 to 89	10	10	9	7		
90 to 94	<4	<4	<4	<4		
95 to 99				<4		
Bladder Carcinoma	M	70 to 74	<4	<4	<4	<4
Occupational Asthma	M	60 to 64		<4	<4	<4
		70 to 74	<4	<4	<4	<4
Chronic Obstructive Pulmonary Disease	M	55 to 59	<4	<4		
Other Respiratory Disorders	M	50 to 54		<4	<4	<4
		55 to 59	<4	<4		<4
		60 to 64	<4			<4
		65 to 69	4	<4	<4	<4
		70 to 74	5	<4		<4
		75 to 79		<4	5	<4
		80 to 84	<4			<4
85 to 89	<4	<4	<4	<4		
Total			362	335	307	322

