Appendix O - Lead Paint Removal Guidance in NZ

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1.0 AS/NZS 4361.1 & .2:2017

Australian/New Zealand Standard Guide to hazardous paint management

- Two parts to this standard
- Part 1: Lead and other hazardous metallic pigments in **industrial** applications.
- Part 2: Lead paint in **residential**, public and commercial buildings.
    - Part 2 is just lead, excludes other metals unlike part 1 so I have only reviewed that against other lead based paint guidance.
    - Part 2 objective is to provide **guidelines** for the successful management of lead paints and related hazards on non-industrial structures such as **dwellings** and public buildings when **any paint disturbance or removal is carried out**.
    - Covers roles of those involved, detection and assessment of lead paint, management options, paint stabilisation procedures, paint removal procedures, protection, waste management and project completion.

Review of available guidance in NZ.

Item	**Lead Paint Guidance**					
	AS/NZS 4361 Part 2 2017	Master Painters NZ Fact Sheets	Health NZ website	Guidelines for the Management of Lead-based Paint Ministry of Health, MBIE	Health NZ The Environmental Case Management of Lead Exposed Persons	WorkSafe
Date	2017	Various	5 Sept 2024	1 Sep 2013 (However still needs an update).	2024	June 2023
Link	To be purchased from Standards	Wasteminz Lead Paint onedrive	info.health.nz/keeping-healthy/environmental-health/hazardous-substances/lead-	www.health.govt.nz/publications/guidelines-for-the-	www.tewhatuora.govt.nz/publications/the-environmental-case-management-of-lead-	www.worksafe.govt.nz/topic-and-industry/hazardous-substances/guidance/s

			based-paint#AccordionItems-2510	management-of-lead-based-paint	exposed-persons-guidelines-for-public-health-officers	ubstances/managing-lead-based-paint/
Definition of lead based paint	<0.1% lead	Not stated	Not stated	Not stated	Not stated	Not stated
Dates inferred to be present	Pre 1997!	Master Painters NZ Association strongly recommends anyone involved with redecoration of properties that were built **prior to 1970** to attend a MPNZA Lead Based Training course	*<1990's* *'If a building was built in the 1980s or earlier, it is best to presume that it has been painted with lead-based paint'*	*<1980* *'Although properties built after 1970 are generally considered to have low lead content paints, there is evidence that some properties built between 1970 and 1980 were still being painted with lead-based paints'* *'Assume that paintwork on pre-1980 buildings is lead-based, unless it is proven otherwise by records or testing'.*	*Lead-based paint is almost certain to be present on pre-1945 paintwork and is likely to be present on pre-1980 paintwork*	*If a building was built in the 1980s or earlier, it is best to presume that it has been painted with lead-based paint.*
Definition of competency (for assessing lead based paint pre or post removal)	Lead Specialist – demonstration of competency through qualifications or accreditation by relevant industry body…	Not stated	Not stated	Predates PCBU but just refers to competent contractors not independent assessors.	Not stated	References 2013 Guidelines for the Management of Lead-based Paint Ministry of Health, MBIE
Definition of competency (removal)	Lead Abatement Contractor	Lead Based Training course	Not stated	To be competent! Aware of the hazard, and capable of managing it effectively	Reliable, suitably trained and experienced painting contractors certified by Master Painters New Zealand (MPNZ) in the management of lead-based	

					paints. MPNZ arranges training programmes on the management of lead-based paint for their members, apprentices and the wider painting industry. Those that successfully complete the training are designated as 'Lead Based Paints Accredited Contractor'	
Lead paint testing methods described	XRF Laboratory analysis	Sodium sulphide resene kits and 3M lead		Sodium sulphide Laboratory for dust and soil	Sodium sulphide XRF Lab – paint, soil and dust wipes	
Recommended procedures for lead paint removal described	• **Wet scraping and wet sanding (preferred)** • On-site chemical stripping • Off-site chemical stripping • Removal by heat gun and scraper • (those described in Part 1 may also be applicable including water blasting)	• Wet scraping • Chemical strippers • Wet hand sanding • Low temp heat processes. • Dry powder sanding with HEPA vacuum. (All preferred methods?!) NOT recommended includes; • Dry sanding or scraping • Water blasting • Torch or open flame burning • Abrasive blasting	• Wet sanding • Scraping • Abrasive blasting • Blasting with heat (INCLUDING BLOW TORCH!) • Chemicals • Dry sanding by hand or machine • Water blasting	• Hand scraping/sanding • Chemical Stripper • Heat Treatment • Machine sanding • Water blasting • Abrasive blasting Wet sanding not described.	For small areas, wet scraping and wet sanding are the preferred methods. Chemical stripping can be used. **Heat stripping is not recommended.** Only power sanders that are fitted with HEPA filters should be used. Abrasive blasting should never be used on domestic premises.	
Monitoring for exposure to	Just health blood	Not stated	Not described	health blood monitoring of workers and public.	Not described	TWA 8hr is actually 0.05 mg/m3. (Lead,

receptors during removal?	monitoring of workers.			Lead in Air workplace exposure standards described 8hr TWA **0.1** mg/m3. (Tetraethyl lead, as Pb). TWA 12 hr 0.05mg/m3 Action level 25% of TWA.		inorganic dusts and fumes, as Pb)
Clearance testing post work (lead containing dust or soil contamination ?)	Clearance testing for soil and dust on surfaces described in detail.	?	Not described	Topics are discussed but no guidance on action levels for dust or who should assess and when.	Described well.	
Clearance goal soil	Regulatory limits	Not stated	'***Effect of lead on the garden*** *Vegetables and fruit grown in soil contaminated by lead-based paint are safe to eat as long as they are carefully washed to remove dust and soil from the leaves on the outside of the plant.* *If safety precautions haven't been taken, soil may be contaminated and the top layer may need to be removed.*	Criteria - soil Background level (Bare soil); <200 mg/kg Investigation level (Bare soil); 300 mg/kg Action level (Bare soil) Lead level; 1000 mg/kg Action level (Children's play area); 300 mg/kg	*There is evidence to suggest that soil removal and replacement may not be worthwhile as an abatement strategy at soil lead levels less than 3000 µg/g, but a more stringent standard, 210 µg/g, is likely to be appropriate for sandpit sand or other high-contact areas for young children* The SCS of 210 mg/kg can be considered as a 'level of concern' for a residential setting and is recommended as a trigger for investigation.	
Clearance goal dust	Reg or exceed background	Not stated	Not described	Refers to Environmental Case Management of Lead Exposed Persons Guidelines for Public Health	The US Environmental Protection Agency's hazard standards (USEPA 2019) may be used as a guide: floors (including carpeted	

				Units, Ministry of Health 2012.	floors) >110 µg/m2 □ interior window sills >1080 µg/m2	
Waste Management	Generic and vague guidance	Not stated	Not described	Brief		