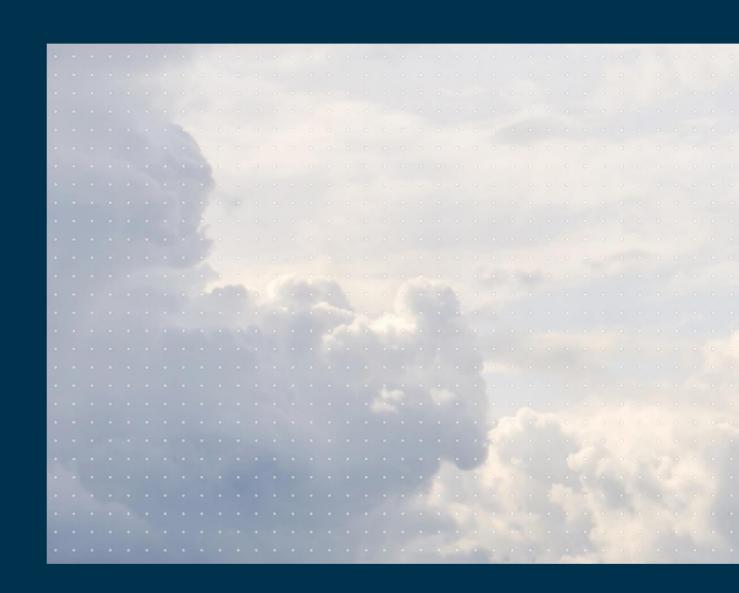


Environment Protection Authority

Lead paint & waste

AHCA

March 2021 Alan Ly – Senior Project Officer



This presentation should not be used as a substitute for EPA or legal advice. This presentation is supported by verbal explanations that provides context and meaning. You should still seek legal advice, and/or contact the EPA to receive its most up-to-date advice.

Overview of presentation



- 1. Respond to 15 questions requested by AHCA regarding waste classification of lead paint/ waste
- 2. Provide practical examples that explain the classification framework
- 3. Industry practices the EPA does not allow
- 4. Improvements to the waste classification framework

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1. Definition of lead paint waste (i.e. what is considered lead paint waste (%w/w), paint on its own, paint fixed to materials, dust)?



Hazardous Waste

Lead **paint** waste arising otherwise than from residential premises or educational or child care institutions (page 3 – Step 3)

May include:

- 1. Lead paint
- 2. Lead paint attached to materials, e.g., building materials
- 3. Lead paint in waste
- 4. Lead paint dust

There are no thresholds

General Solid Waste (non-put)

Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions (page 4 – Step 3)

May include:

- 1. Lead paint
- 2. Lead paint attached to materials, e.g., building materials
- 3. Lead paint dust
- 4. Lead in soil/ excavated materials
- 5. Any waste contaminated with lead

There are no thresholds



1. (continued) – Example scenarios



Hazardous Waste

Lead paint waste arising otherwise than from residential premises or educational or child care institutions (page 3)

General Solid Waste (non-put)

Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions (page 4)

Scenario 1

Pb testing in soil on a site shows high levels of Pb exceeding the HW classification. What is the classification?

Answer: Depends

GSW on Res/etc

HW on Comm/Ind

Scenario 2a

Concrete & timber waste contains Pb paint from a industrial site. What is the classification?

Answer:

Hazardous Waste (if left on materials)

Scenario 2b

Pb paint removed from concrete & timber waste. What is the classification?

Answer:

Pb paint - HW

Concrete/timber - GSW

Scenario 3

Pb testing on fill on Res site show high levels of Pb exceeding HW classification. What is the classification?

Answer: GSW

1. (continued) – Example scenarios



Hazardous Waste

Lead paint waste arising otherwise than from residential premises or educational or child care institutions (page 3)

General Solid Waste (non-put)

Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions (page 4)

Scenario 4

A residential site has Pb and Cd concentrations exceeding the HW classification. What is the classification?

Answer

GSW for Pb | HW for Cd – Classified as HW

Scenario 5

Building from
Industrial site with
Pb paint is
demolished for
disposal. What is the
classification?

Answer:

Hazardous Waste

Scenario 6

Metal structures containing Pb paint from a commercial site are removed for disposal. What is the classification?

Answer:

Scrap metal – taken to licensed facility

1. (continued)



Hazardous Waste

Lead paint waste arising otherwise than from residential premises or educational or child care institutions (page 3 – Step 3)

General Solid Waste (non-put)

Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions (page 4 – Step 3)

EPA position

Since 2018, EPA has allowed testing of Pb paint on non-residential premises etc (e.g. commercial/industrial sites) to determine its total conc. (SCC) and leachable conc. (TCLP) for comparison against relevant SCC and TCLP values in the WC Guidelines.

Example: Pb paint found on commercial site would otherwise be pre-classified as HW, but if testing shows it complies with the GSW, or RSW classification, then it may be disposed as GSW or RSW.

2. Why is there a distinction between residential/educational/child-care facilities and other sites around classification of lead paint waste?



Hazardous Waste

- 1. Policy targets high concentrations of lead paint
- 2. Commercial/industrial premises Ave 15%, max up to 60%
- 3. WC Guideline: >0.6% (total conc.)= HW
- 4. Quantity considered large
- 5. These premises must comply with OH&S legislation and are able to properly immobilise/ remediate lead paint

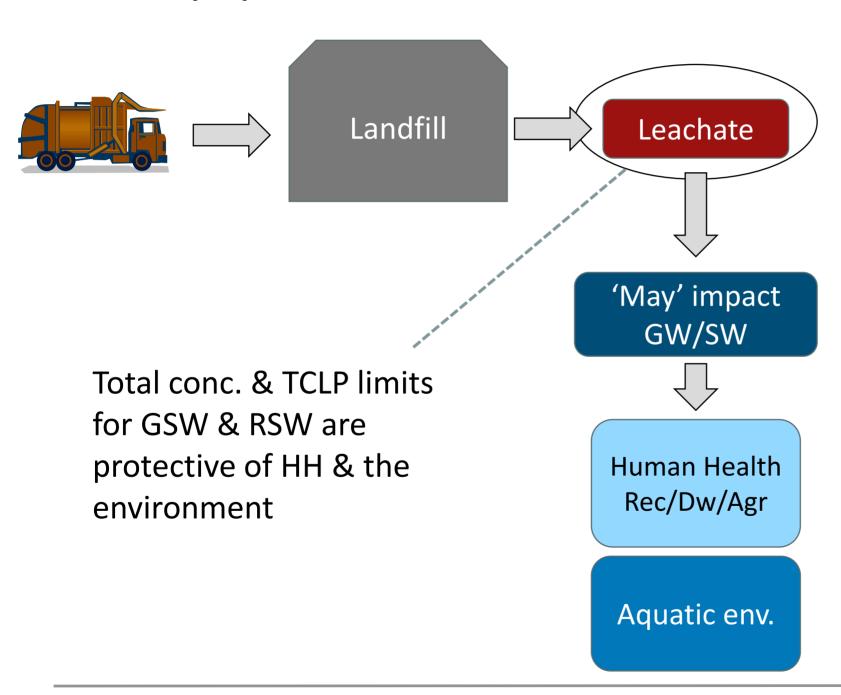
General Solid Waste (non-put)

- 1. Policy targets white lead paint (lead carbonate)
- 2. Quantity considered small
- 3. Conc. around 0.1% | WC Guideline: >0.15% (total conc.) = GSW
- 4. NSW Government position classify& quickly dispose to landfill
- Grit blasting/ immobilisation/ remediation on these sensitive sites may increase the risk of harm to occupants

3. Which categorisation of the lead containing paint does the EPA endorse, WHS Regulation 2017 or Australian Standard?



What is the purpose of waste classification & what does it protect?



- 1. Outside scope of EPA
- 2. Classification in WC guidelines are irrespective of concentrations

4 – 6. Requirements for disposal of lead paint waste, incl. C&D waste containing Pb paint from non-residential sites. 5. How lead paint waste is processed at the waste facility



GSW

- Any facility licensed to receive and dispose of GSW
- There are no HW disposal facilities in NSW

Hazardous Waste



- Pb paint taken to HW processing facility, e.g. Cleanaway
- Pb Paint taken to secondary lead smelting facility such as Enirgi
 Power Storage Recycling Pty Ltd in Wagga Wagga
- Immobilisation onsite via EPA immobilisation approval followed by disposal as GSW or RSW
- Interstate disposal
- If you choose not to remove lead paint, then the building materials are classified as Hazardous Waste
- EPA recommends removing lead paint first with paint removal agent/ grit blasting from building materials

6b. Why remove lead paint from building materials?





RF & Agg = >1M tonnes/ yr

- Make recovered aggregate (applied on any site)
- Make recovered fines/ processed soil (applied on any site)
- May contaminate other recycled waste streams, e.g. landscaping materials

If lead paint not removed

Increases risk to human health & the environment



 Concentrations of HW (total conc. and leachable conc.) can contaminate GW & SW at levels that would impact the aqua. env/ DW/ REC/ AGR

7 - 9 & 15. Clarification about lead dust – how to classify?



Lead paint classification



Lead dust classification

- Based on the Waste Classification Guideline, part 1
- If from residential etc, then preclassified as GSW
- If from non-residential etc, then preclassified as HW
- Disposal same as lead paint above

GIA 2020/01

Pasminco naturally immobilised waste

- Dust, soil, soil containing dust can be classified as GSW
- Must be within the Pasminco lead abatement strategy area at Cockle Creek

10. What happens with lead waste if it is from a residential property that has been reclassed as commercial?



- Depends on the issue
- Contact the EPA
- EPA can be pragmatic
- 11. Provide examples of storage methods for lead dust and paint for transportation to a waste facility after remediation
- Waste in 'general' must be stored in an environmentally safe manner clause 112
 Waste Reg
- EPA considers environmentally safe manner as not causing, or unlikely to cause a pollution incident. E.g. Bags of dust should be sealed.
- Waste tracking required Waste Reg Schedule 1 Part 1, 2 & 3
- Contact SafeWork, follow appropriate codes of practices/ standards

12. When lead dust or paint are removed by sucker truck, how do you classify? Can we use NEPM criteria?



- Same classification process for lead paint and dust using WC Guidelines, part 1
- Cannot use NEPM (Assessment of site contamination) criteria

13. ACT does not have a HW pre-classification, what is the EPA position about transportation and disposal between ACT and NSW borders?

- Waste Classification Guidelines relate to NSW only
- Seek advice from other jurisdictions about transporting waste from NSW into their jurisdiction
- You may need to comply with their requirements
- May need tracking interstate

14. With removal from the previous Australian Standard of dust clearance/inspection standards, what does the EPA deem as the preferred standard to be adopted?



- Outside the scope of the EPA to advise about clearance inspection standards
- EPA does not regulate clearance inspection standards. May be a SafeWork matter
- Regarding waste regulation in the context of lead paint/waste, role of EPA is to ensure:
 - Waste classified appropriately
 - Waste taken to a lawful disposal/ recycling facility
 - Waste recycled are lawfully reused

Industry practices the EPA does not allow



Average Pb conc. across the mass of the waste

- E.g. 1% Pb in paint but divide by the weight of waste to lower the result
- s144AA False/misleading
- (1)Corp: \$250K | Ind: \$120K
- (2) Corp: \$500K | Ind: 240K: 18m prison

By-pass HW & use GSW

- Waste generators by-pass HW pre-classification & go straight to B&D pre-classification as GSW. E.g. knock down building & call it GSW.
- s144AA –(1) & (2) False/misleading
- s143 Unlawful transport and deposit of waste

Mis-use EPA 2018 advice

- Using EPA 2018 advice, waste generators knock down building, sample building material rather than Pb paint in Step 5 to classify
- s144AA -(1) & (2)
- S143 Unlawful transport and deposit of waste

Improvements to the WC framework



GSW from Res site being recycled Although pre-classified as GSW, some of this waste are ending up in recycling facilities, and eventually being land applied back into the environment and community

Review & refine definitions

- WC Guideline was developed in late 90's, we are now in 2021: Does industry have data about Pb paint in both residential & Comm/Ind sites?
- Make it clearer whether applies to in-situ or ex-situ

Welcome industry feedback

End of slides



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