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Why you should have your ceiling dust removed before you have insulation installed

By Anne Roberts and Elizabeth O'Brien, The LEAD Group Inc. Fact Sheet created 14th May 2010, based on a LEAD Action News article

The LEAD Group urges householders to have ceiling dust removed before insulation is installed. This is typically going to be the only way that insulation installers will be forced to comply with state OH&S regulations in regard to protecting themselves from the hazards of ceiling dust.. A good risk management plan for insulators includes safe removal of ceiling dust prior to insulation installation.

We also recommend that the removal of ceiling dust be done in accordance with guidelines set out by WorkCover NSW (see below).

Dust removal should be carried out by a trained, competent dust removal contractor, using correct equipment.

The only such group of contractors in Australia are the members of The Australian Dust Removalists Association, (ADRA) - see www.adra.com.au

Only NSW WorkCover, out of all the Australian States (in Victoria, the authority is called "WorkSafe", in South Australia it is called "Safe Work") has written a fact sheet on ceiling dust containing lead. NSW WorkCover and Queensland Workplace Health and Safety have a fact sheet on the hazards of insulation installation, among them lead and ceiling dust. All state and territory Occupational Health and Safety regulations require that the employer identify hazards prior to work beginning, and that they have a Hazard Management Plan to ensure safe work conditions for their employees.

The NSW fact sheet on a code of practice for the Control of Hazardous Substances states that:

"Contractors and workers involved in the cleaning, repairing, or demolition of ceilings should be aware of the information contained within this guidance note."

Ceiling dust removal prior to insulation installation (as much to protect the installers as to detox the home for all future residents) will cost homeowners more money than if they just have insulation laid on top of their accumulated ceiling dust. However, in most cases, non-removal of ceiling dust will make the work of insulation installers non-compliant with OH&S regulations. Note for example, the following statements from NSW WorkCover's "FACT SHEET: HOW TO SAFELY INSTALL CEILING INSULATION"

THE HAZARDS

When installing ceiling insulation, you should control the health and safety risks associated with:

- insulation containing synthetic mineral fibres (SMFs) eg rockwool or glasswool or other fibres or dust that can irritate the skin, eyes and upper respiratory tract
- hazardous substances eg asbestos, pesticides, chemicals or lead

PRIOR TO INSTALLATION

If you're an employer, head contractor or self-employed worker, you must:

 follow the risk management process – ie identity all the hazards, assess their risks and control them

If you are an installer, before you enter the roof cavity to start the installation:

- Do a pre-work risk assessment of the roof cavity and advise the building owner of any identified risks that you cannot eliminate or control.
- Only start work once all the above is complete, and you are satisfied that the system of work and working environment is safe and without risk to health.

Now that two states WorkCover authorities have identified the hazard of leaded ceiling dust for insulation installers Australia-wide, all state and territory WorkCover Authorities, should similarly create informative factsheets for insulation installers and police the industry in this, it's greatest growth phase ever.

We include here, for the guidance of householders and/or contractors, a link to NSW WorkCover's **GUIDANCE NOTE FOR CEILING DUSTS CONTAINING LEAD** and quotes from it:

Note: The Australian Safety and Compensation Council (ASCC) publish exposure standards in the document National Exposure Standards for Atmospheric Contaminants in the Occupational Environment 3rd Edition [NOHSC: 1003 (1995)]. Values for the exposure standards can be found online in the Hazardous Substances Information System (HSIS) database (www.ascc.qov.au) and interpretation of these standards can be found in the **Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment 3rd Edition [NOHSC: 3008 (1995)].**

Safe work procedures

"Contractors and workers involved in the cleaning, repairing or replacement of ceilings are advised to consider the following procedures, in order to minimise health risks from ceiling dust.

These procedures include:

1. Working in ceilings [Information for householders as well as contractors]

- The sealing of any openings between living areas of the dwelling and the ceiling void prior to the commencement of any work to prevent dust entering the living area.
- The use of vacuum cleaners which comply with AS/NZS 3544 Industrial vacuum cleaners for particulates hazardous to health, to prevent the release of lead containing dust while it is being removed.

2. Personal Protective Equipment (PPE) [Information for contractors]

The use of Personal Protective Equipment, including:

- 1. Respirators complying with AS/NZS 1716 Respiratory Protective Devices and used according to AS/NZS 1715 Selection, use and maintenance of respiratory protective devices. If the results of the risk assessment identify significant chemical contamination, a full-face respirator may be required to provide the needed level of respiratory protection. Note: A respiratory protection program should be set up by management in accordance with AS/NZS 1715.
- 2. Where respirators relying on facial fit are being used, workers should shave daily as beard and stubble can interfere with the facial fit, which could result in exposure to lead containing dust.
- 3. Eye protection, complying with AS/NZS 1336 and AS/NZS 1337 whenever full-face respirators are not worn.
- 4. Disposable coveralls with fitted hood (the type suitable for use in agricultural spraying and asbestos removal work, changed at regular intervals).

3. Decontamination and Personal Hygiene [Information for contractors]

The adoption of thorough decontamination procedures before each work break, including the observance of a high standard of personal hygiene. This can be achieved by:

- provision of soap and adequate washing facilities
- washing of hands before eating, drinking and smoking
- employers providing laundering of work clothes
- placing any used disposable overalls into marked bags, which should be sealed for disposal with other waste

- the containment and disposal of the removed dust and any contaminated clothing, rags and other waste should be in accordance with any NSW Department of Environment and Conservation (NSW DECC) (formerly the NSW EPA) requirements
- after the work has been done, all equipment must be decontaminated and the area cleaned of dust. Use wet methods to dampen down dust material before wiping up, or use industrial vacuum cleaners.

4. Training [Information for contractors]

Workers should be provided with training that includes:

- 1. the hazards associated with this type of work
- 2. an understanding of the health risk assessment process
- 3. an understanding of the results of health surveillance and biological monitoring
- 4. the selection, use and maintenance of respirators
- 5. safe work methods
- 6. acceptable personal hygiene for this type of work.

All training should be documented and a register of training kept.

How much does it cost to detox a home of ceiling dust? Who should pay it?

The Australian Dust Removalists Association (ADRA) website states:

"ADRA advises that given today's current fuel prices and where there is relatively easy access to the job the average cost to vacuum a dust-only ceiling space is approximately \$10 per m^2 using WORKCOVER specified HEPA filtered equipment by trained staff. The \$10 per m^2 is for a building of approximately $100m^2$ and smaller might have a larger charge whereas larger would be less per m^2 .

"Difficult entry and trussed low pitched roofs, removal of rubble and removal of old insulation, both batts and loose fill would involve extra cost. In cases of small areas, expect there to be a minimum job price."

As noted above, no ceiling dust tests that we've seen in Australia have revealed the absence of lead. We therefore do not recommend *testing* ceiling dust for lead. It would almost certainly be an unnecessary expense in all but the newest of houses.

Wouldn't it be wonderful if the federal government were to use some of the billion dollars or so that it received when the 2cents per litre price differential between leaded and unleaded petrol was introduced in the 1990s to speed the phase-out of leaded petrol, to set up a rebate to cover the cost of ceiling dust removal today, cleaning up all that lead from vehicle emissions once and for all?