

3.10 LEAD IN SOIL AND DUST

GOAL

To minimise the rate of lead accumulation in soils and dust and to provide management strategies for lead contaminated soils and dusts

The Lead in Soil and Dust component of the Lead Management Action Plan sets objectives and strategies on the following issues:

- establish the level of risk exposure to lead in soil and dust in NSW
- education measures
- the development of standards and protocols
- the review of planning controls and mechanisms.

The establishment of the Lead Reference Centre underpins the successful implementation of these strategies.

1. Establishment of Lead Risk Status in NSW

Objective:

To determine the extent to which lead is currently being emitted from NSW industries and major transport corridors.

Strategies:

- (1) Develop and undertake a lead emissions inventory on a state-wide basis. The inventory should be updated on a regular basis (frequency determined by the emission rate). This information should be included in the State of the Environment Report.

(Strategy implementation: Undertaken by the EPA with the assistance of appropriate authorities, industry and the Lead Reference Centre.)

- (2) Develop and assess techniques for removal of lead containing dust from exterior and interior surfaces

(Strategy implementation: Environmental Lead Centres, where these exist, with the Lead Reference Centre developing and modifying education material for wider usage)

- (3) Collation of all available data to identify areas of risk from lead exposure

(Strategy implementation: EPA, through an emission inventory and roadside and urban lead studies)

- (4) Correlate blood lead data with the above environmental data to determine an accurate picture of community lead hazard

(Strategy implementation: NSW Health with assistance from the Environmental Lead Centres where these exist. To be co-ordinated with the information obtained from undertaking blood lead investigations (see section 3.5)

Education

Objectives:

assist the public to recognise potential lead contamination issues which may impact on their child's health.

minimise further lead loading of urban soils and dusts.

provide advice on lead exposure risk reduction strategies.

ensure that education and risk reduction information is readily accessible to the community.

Strategies:

- (1) Establishment of a Lead Reference Centre to develop and disseminate education materials on reducing the lead hazard and to provide a lead advisory service for the community.

(Strategy implementation: NSW Government)

- (2) Development of self assessment-style exposure risk identification guides.

(Strategy implementation: EPA, NSW Health and the Environmental Lead Centres where these exist, co-ordinated by NSW Health and the Lead Reference Centre)

- (3) Develop information guidelines which clearly outline risk reduction actions that can be implemented by home owners, schools, play centres and other target groups where the exposure to lead may be high.

(Strategy implementation: Lead Reference Centre with input from relevant agencies and Environmental Lead Centres where these exist)

- (4) Assessing and modifying where necessary, information developed by community Environmental Lead Centres as well as from other national and international studies on risk reduction and abatement strategies.

(Strategy implementation: Lead Reference Centre with assistance from relevant agencies)

- (5) Testing of domestic and industrial vacuum cleaners to determine their ability to filter fine dust particles

(Strategy implementation: Environmental Lead Centres where these exist, with the Lead Reference Centre to modify and develop associated education material for wider usage)

Standards and Protocols

Objective:

Standardise methodologies used in the assessment and management of contaminated sites so that error is minimised and cross comparisons of results can be made.

Strategies:

- (1) The continued development of soil sampling and analytical standards for lead.

(Strategy implementation: Standards Australia, co-ordinated by the Lead Reference Centre)

- (2) The development of standardised dust sampling methodologies.

(Strategy implementation: Environmental Lead Centres where these exist, co-ordinated by the Lead Reference Centre)

- (3) Investigate and develop where necessary, techniques which effectively reduce exposure to lead. Validate existing techniques to ensure that they are not causing secondary lead contamination.

(Strategy implementation: Environmental Lead Centres, co-ordinated by the Lead Reference Centre)

4. Review of Planning Controls and Mechanisms

Objectives:

To streamline administrative controls on contamination issues, with particular reference to lead.

To reduce the lead loading on children wherever possible through planning controls.

Strategies:

- (1) Review current planning instruments and guidelines available (such as s.149 certificates, Circular C20, Unhealthy Building Land Notices) to manage contamination issues from both point and diffuse sources. The impact of these instruments on the management of sites should be assessed in terms of equity, community impacts and effectiveness.

(Strategy implementation: Interagency forum, co-ordinated by the Department of Planning)

- (2) Review planning policies to enable greater control of the development of sensitive landuses in high risk lead contamination areas.

(Strategy implementation: Interagency forum, co-ordinated by the Department of Planning)

- (3) Developing codes of practice and guidelines for the removal of lead based paints from non-scheduled premises. These guidelines should be distributed by local governments in conjunction with issuing development approvals, building approvals and demolition approvals.

(Strategy implementation: Standards Australia, co-ordinated by the Lead Reference Centre)

- (4) Investigate waste management strategies for the disposal or re-use of urban soils and dusts contaminated with high levels of lead to prevent inappropriate use or disposal of these materials.

(Strategy implementation: EPA, Waste Service)

- (5) Resolution of financial and liability issues associated with contaminated sites.

(Strategy implementation: ANZECC (work in progress))