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Advice in Relation to Clandestine Laboratory Clean-up Criteria for Roof Spaces

The Clandestine Drug Laboratory Remediation Guidelines, published in 2011, provide surface residue criteria for the assessment and remediation of indoor surfaces in residential homes and commercial buildings. For residential homes, the criteria derived are relevant to living areas where there is frequent daily direct contact by adults and children with various surfaces. The criteria presented in the guidelines have been derived (by Environmental Risk Sciences) using a risk-based approach where the nature, type, duration and frequency of these exposures has been calculated and evaluated in conjunction with the toxicity of the contaminants.

The relevance of these criteria, however, to less accessible areas such as roof spaces, however requires further consideration.

In relation to the presence of surface contamination in a roof space (not accessed and used as a living space), the potential for exposure will be minimal. Exposure to contamination on surfaces within the roof space can occur via the following mechanisms:

- Direct contact, where residents or trades-people may enter the roof space for the purpose of home renovations or repairs. These exposures are of limited duration and infrequent (i.e. for a few hours or days a year only) and will be relevant to adults or older children (teenagers asked to assist with home renovations). This is significantly different to the exposure scenario used to establish the residential guidelines, namely direct contact of surfaces by young children (toddlers) every day of the year (where contact includes frequent mouthing of hands and objects that come into contact with the contaminated surfaces). Hence the residential surface criteria will not be relevant for roof spaces. Without recalculating specific criteria for exposures that may occur in the roof space, it is noted that the exposure assumptions adopted in establishing the commercial surface criteria are more relevant to those in the roof space. The commercial criteria were derived on the basis that direct contact with surfaces was by adults where the hands and potentially lower arms came into contact with surfaces, hands were placed in the mouth for up to 1 hour each day for 240 days of the year. These exposure assumptions, while still conservative, are more relevant to the potential exposures that may occur when accessing the roof space for maintenance/repairs. On this basis it would be appropriate (and conservative) to adopt the commercial surface criteria for the purpose of assessing the suitability of surfaces in a residential roof space.
- Indirect contact, which may occur when dust (containing contamination) enters the living space beneath via cracks and gaps in the walls and ceilings. This can only occur if the contamination that remains is in a form that is dislodgeable (i.e. as a dust). Methamphetamine residues that may have entered the roof space during a cook may be somewhat dislodgeable (though typically not as a dust) prior to remediation, however following remediation where all dust has been removed this mechanism is no longer relevant. If the roof space were not remediated the potential for residues associated with drug manufacturing operations to be present as a dust that can move into the living spaces below is limited, however it is recommended that ceiling spaces are assessed and

remediated/cleaned to remove dust (dislodgeable residues) such that the surface residue criteria established for commercial areas is met.

The concept of having different clean-up criteria for different areas of a house based on different levels of exposure (or potential for contact) has been adopted in the derivation of action levels for lead in indoor surface dust established by the USEPA. Action levels for floors, that are regularly accessed by young children, are 5 to 8 times lower than those established for window sills and troughs, which are infrequently touched by young children. Hence the approach of adopting a different guideline for the roof space of residential homes formerly used for the manufacture of drugs is not new and is recognised as an appropriate approach to ensuring contaminated surfaces in homes are cleaned appropriately such that the risks to human health are adequately protected.

On the basis of the above a remediation criteria presented in the Guidelines equal to that set for commercial premises can be applied to residential roof spaces (that are not living areas), and are considered to be adequately protective of health.

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If you require any additional information or if you wish to discuss any aspect of this letter please do not hesitate to contact me on (02) 9614 0297 or 0425 206 295.

Yours sincerely,



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