Note: The following guidance has not yet been updated to reflect the changes in regulation. However, much of the information is still useful and relevant. Please use this document in conjunction with the regulations.

Colorado Department of Public Health and Environment

Cleanup Of Methamphetamine Labs
Summary

Typically after a methamphetamine (meth) lab is discovered by law enforcement, the bulk of any lab-related debris, such as chemicals and containers, is removed. However, contamination may be left on surfaces and in absorbent materials (e.g., carpets, furniture, sinks, drains and ventilation systems). Though often found in small amounts, meth lab contaminants may pose health threats to persons exposed to them. In response to increased concerns over the contamination left behind at meth labs, the Colorado Department of Public Health and Environment (the Department) put together guidance to assist local agencies, property owners, and the general public in addressing contamination at former meth labs. This guidance can be found on the Internet at http://www.cdphe.state.co.us/hm/methlab.pdf and is summarized below.

Authority to Require Cleanup

There is no current state statute that specifically authorizes state or local agencies to require the decontamination of the interior of private properties contaminated by clandestine meth lab activities. However, local government agencies may use broad authorities given to them in nuisance statutes, regulations, ordinances and various local codes to require cleanup.

Areas of Contamination

Potential areas of contamination can be divided into primary and secondary areas. Typical primary areas of contamination include:

- **Processing or "cooking" areas:** Significant contamination in these areas may be caused by spills, boil-overs, explosions, or by chemical fumes and gases created during the heating and distilling portions of the "cooking" process. Indoor areas affected may include floors, walls, ceilings, used glassware and containers, working surfaces, furniture, carpeting, draperies and other textile products, plumbing fixtures and drains, or heating and air-conditioning vents.
- **Disposal areas:** Indoor areas include sinks, toilets, bathtubs, floor drains, vents, vent fans and chimney flues. Outdoor areas may include soil, surface water, groundwater, dumpsters, sewer or storm systems, septic systems and cesspools.
- **Storage areas:** Contamination may be caused by leaks, spills or open containers.

Secondary areas of contamination may include:

- Locations where contamination has migrated, such as hallways or high-traffic areas.
- Common areas in multiple dwelling structures; adjacent apartments or rooms may also be contaminated.
- Common ventilation or plumbing systems in hotels and multiple dwellings.

Cleanup Procedures for Structures

In most situations, cleanup/decontamination of structures that have been used as meth labs will involve one or more of the following measures:

- **Airing-Out:** Solvents and other chemicals may have soaked into the walls or furnishings and slowly volatilize back into the air. Proper ventilation may safely reduce contamination and decrease odors.

- **Removal:** Visibly contaminated (etched or stained) sinks, bathtubs, and toilets are difficult to clean and may need to be removed and replaced. Absorbent materials, such as carpeting, drapes, furnishings, wallpaper, clothing, etc., can absorb vapors and may collect dust and powder from the chemicals involved in the manufacturing process. Some absorbent materials can be washed or cleaned if they exhibit little to no odor or staining, but many stained materials or those with odors often have to be disposed of.

- **Detergent-Water Washing:** Nonporous and semi-porous surfaces (such as floors, counters, tiles, walls and ceilings) should be thoroughly cleaned with a detergent-water solution or steam cleaned. Methanol or isopropyl alcohol may also be used for cleaning, but should only be used in a well-ventilated area.

  Cleaning of porous materials that are not discarded will usually consist of vacuuming using a machine equipped with a HEPA filtration system, followed by hot water detergent scrubbing. Non-washable materials, such as lined curtains, that are not heavily contaminated may be steam-cleaned.

- **Ventilation System:** All air filters in the ventilation system should be replaced, vents should be removed and cleaned, the system's ductwork should be cleaned, and surfaces near inlets and outlets should be cleaned.

- **Encapsulation or Sealing:** Interior surfaces (e.g., walls, wood flooring, ceilings, and paneling) should be painted with an oil-based paint, epoxy, or other material suitable to create a physical barrier capable of preventing volatilization of contaminants.

- **Plumbing:** If staining is noted around sinks, toilets or tubs, or if a strong chemical odor is coming from household plumbing, the plumbing system should be flushed with generous amounts of water to reduce the concentration of residual chemicals.

- **Personal Belongings:** If residents of the structure need to remove personal items, they should do so only after the items have been properly decontaminated. As with household furnishings, personal items that are visibly stained are hard to clean and may need to be discarded. Items such as clothing that are not visibly stained can be laundered one or more times to remove any residual chemicals. Non-porous and semi-porous items should be decontaminated using a detergent-water wash, or similar cleaning method, as described above.

Post Cleanup Assessment and Re-occupancy of Structures

It is recommended that testing be conducted after cleanup has been completed to demonstrate that the structure is safe for re-occupancy. Based upon information currently available, a cleanup level for methamphetamine of 0.5 ug/ft^2 on a wipe sample appears to be the most conservative approach to determine the adequacy of cleanup. Other compounds may also be tested for, as deemed necessary based on the preliminary assessment of the structure.

For More Information

Colorado Department of
Public Health & Environment
Hazardous Materials and
Waste Management Division
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Customer Technical Assistance (303) 692-3320
(888) 569-1831 ext. 3320 toll-free
Division Website **http://www.cdphe.state.co.us/hm/**
E-mail **comments.hmwmd@state.co.us**