## Cleaning up the Meth: A 12-Step Process

- Step 1: Secure the Property: If a structure is suspect, do not enter the building. Instead, allow local law enforcement and first responder hazmat teams to remove toxic and hazardous drug paraphernalia and chemicals. After this is complete, the testing and remediation process can begin. Personnel who enter a former meth lab should have safety and health training. Appropriate personal protective equipment (PPE) such as eyeglasses, heavy gloves, foot coverings, steel toe boots and long-sleeved coveralls or a disposable protective suit must be worn.
- Step 2: Ventilate: Air out meth labs with fresh, outdoor air by opening doors and windows and using blowers and/or a negative air unit with HEPA filtration before, during and after the remediation process. HVAC systems should be completely shut down before and during the remediation process to avoid re-contamination.
- Step 3: Assess & Test, Scope of Work: Why do pre-remediation sampling? Pre-remediation sampling can reduce costs by streamlining the cleanup process and identifying materials that are too contaminated to clean. Pre-remediation sampling also can be useful in identifying uncontaminated areas. An industrial hygienist with the proper certifications should perform sampling. All rooms serviced by HVAC systems should be considered for testing. Pre-remediation testing is important for many reasons. It can ensure safety of workers and levels of PPE necessary. It establishes whether or not contamination levels exceed state and local requirements and if remediation is necessary. Sampling can also show the reach of the contamination and present a scope of work for remediation contractors for developing cost estimates. It can also highlight other hazardous materials relevant to the reconstruction process.
- Step 4: Develop a Cleanup Plan: Use the scope of work provided by the environmental consultant to formulate a plan for cleanup. The plan should show security concerns, status of utilities on site, levels of PPE for workers and a shoring plan if structural integrity is an issue. Outline cleanup methods including removal vs. cleaning, encapsulations if any and procedures for on-site and off-site contamination including a waste disposal plan.
- Step 5: Remove Contaminated Materials: The EPA suggests gross removal followed by 24 hours of ventilation and removal of all meth paraphernalia. This is when the determination is made to clean or discard contents.
- Step 6: Vacuum: Vacuum the floors with a commercial-grade vacuum with a HEPA filter after carpet removal. Standard canister or non-commercial grade vacuums are not recommended. In addition, vacuum walls to remove dirt and cobwebs prior to washing. This will remove particulate contamination but will not remove contamination entirely.
- Step 7: Preliminary Washing of Hard Surfaces: After items have been removed and vacuumed, wash walls and hard surfaces using water. This helps prevents recontamination during the remediation process. Bleach should not be used in the cleaning

process as the reaction between bleach and the chemicals used in producing meth can create a toxic gas. Consider testing wash water to determine if it qualifies as hazardous waste or can be disposed of onsite.

- Step 8: Clean and Seal HVAC System: Shut down the HVAC system immediately and leave it off during the remediation process. Sample all areas and rooms serviced by the system to determine the spread of contamination. Test ducts to determine scope of contamination. Cleaning can be difficult as many times duct work can be porous and can re-contaminate the structure after remediation is complete. Cleaning methods should be left to the discretion of ventilation contractors but experts agree that no chemicals should be added to disinfect ducts.
- Step 9: Thorough Decontamination Washing: Using Crystal Clean by Intelagard, follow manufacturer concentration guidelines and start with the ceilings, walls and finish with floors. Clean other hard-surfaced items like counters and furniture. Clean the entire surface using cold water and a fogger/foamer. Rinse using clean water and a clean cloth. The use of harsh chemicals is not advised as many of the pre-cursor chemicals used in meth production can have adverse chemical reactions. Bleach, for example, can become very toxic.
- Step 10: Consider Encapsulating Walls & Ceilings: Sealing contaminated walls and surfaced with primers and paint can provide a protective barrier but should be done in conjunction with proper cleaning techniques. Several states recommend that products applied to encapsulate surfaces be sprayed on and not hand-rolled.
- Step 11: Flush Plumbing & Septic Systems: Meth chemicals are frequently poured into sink drains and flushed down toilets. As a result, plumbing systems can be compromised via corrosion or even become flammable. Flush plumbing traps with generous amounts of water during the cleaning process and again after remediation if wash water is disposed of on site. Sinks, bathtubs and toilets with visible discoloration and etching should be disposed of. Large amounts of chemical waste can be problematic if they remain in septic systems or private wastewater systems. If there is evidence of contamination, an industrial hygienist should sample the tank for volatile organic compounds (VOCs) and/or pH levels outside the normal range. Expert field screening should be used to evaluate septic system contamination. Remediation of septic systems should be done last.
- Step 12: Clearance Testing: It is very important to show that cleanup effectively reduced contamination. Check with local governments to determine re-occupancy clearance levels. If cleaning does not meet the state standard, the site should be cleaned again or encapsulation or removal should be considered.