Best Practices Protocol for Methamphetamine Clandestine Labs

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Introduction

These best practice protocols are designed to assist law enforcement agencies in the sampling and submission of clandestine lab evidence to the forensic lab. The primary purpose for this protocol is the collection of evidence from methamphetamine clandestine labs; however, much of the information is useful for other types of labs as well. Once a clandestine lab has been identified with potential evidence, all immediate risks must be evaluated and remedied. These will include evacuations of site, Social Services notification if children are involved, and contact to the local Certified Clandestine Lab Response Personnel. Once a complete and satisfactory perimeter established, evidence for the lab can be evaluated. There are a number of classes and training opportunities from a takedown and safety aspect, but not from a sampling, packaging, and lab submission aspect.

It is critical for the Clandestine Lab Response Team to work these cases as their training makes them the most familiar with the proper packaging techniques as well as the evidentiary value for items at the scene. The legal qualifications and proper evidence collection can be different depending on the jurisdiction of offense as well as the capabilities of the laboratory. Keeping a working relationship with lab personnel is imperative.

The information in this guideline should be considered when collecting the evidence; what specific items should be considered for sampling, the amount of sample, and most importantly the proper packaging and handling of the evidence which will be submitted to the lab for analysis.

Collection and Submission of Clandestine Lab Evidence

These guidelines are designed particularly for the collection of evidence from Methamphetamine Clandestine Labs; however most of the information can also be used for other types of clandestine laboratories.

All evidence at the scene should be well documented with pictures as well as an inventory. It will be beneficial for the lab to have copies of these included with the evidece so that they can evaluate all the items found at the scene. This will aid in their knowledge of all the materials, glassware, receipts from purchases and any other items found, as well as the possible hazards. Not all materials found at the scene will be sampled for lab submission, but it is helpful to the analyst to evaluate what was attempted to be made.

The Clandestine Lab Response Team should stay current with the safe handling and packaging requirements for the evidence, as well as the capabilities of the specific lab where the evidence will be sent. This can vary based on jurisdictional laws and the scientific instrumental capabilities available at the lab. It is highly recommended that good communication exist between personnel on the Response Team and the chemists at the lab to assist with any updates. Some items at the crime scene can be so hazardous to transport that the lab will not typically accept them unless a pre-approval has been obtained. Examples of this are sodium and lithium metal. These items are typically not necessary to prove the case and the packaging and transportation is extremely dangerous. Liquid ammonia is also typically not collected and sent to the lab. It is a very dangerous substance which will not be analyzed by most labs.

Packaging samples for submission to a lab involves double and triple layers of appropriate containers for both the protection of the submitting agency and the lab staff as well as keeping the integrity of the chemicals themselves. A representative sample should be taken

from precursor items, chemicals, and reaction vessels which need analysis for court purposes. The bulk items themselves do not need to be submitted. However, an approximation of the total amount of materials should be made and documented through inventory and photos. These samples should be submitted in glass containers such as a vial or jar with Teflon lined lids. It is critical that the lids be lined with Teflon due to the reactive nature of many materials found at a clan lab. Glass is resistant to solvents and corrosive materials which are often submitted. Vial lids with Teflon are also resistant to these materials. Paper cap liners, as well as other types of plastic liners such as polyethylene or polypropylene, can dissolve or breakdown with these strong corrosive materials and organic solvents. Metal caps can react with strong acid and caustic materials. These bottles should not be filled to more than 75% of their total available volume to allow for possible expansion and pressure. Each of these bottles should then be packaged in a second, tightly sealed wide-mouth, high density polyethylene bottle or jar. This package will serve two purposes. First it will provide a cushion to buffer the glass vials and second, to provide a collection container in case the first does not seal well and there is leakage from the glass container. These containers should be labeled in such a manner that they directly correlate to items on the inventory. It is also advisable to photograph the sample which was taken side by side with the corresponding item of evidence. This will serve as clear information to the chemist, officers, attorneys and jury where the sample was taken, and what the original container was that it came from. Depending on the jurisdiction and charges pending, a weight of the material believed to contain the “final product” may require larger containers or multiple containers. It is critical in these cases that the examiner knows that multiple containers are to be combined for a total weight and analysis.

For example a “meth cook bottle” (Item 24) contains white material which may contain Methamphetamine and may be enough to meet a legal weight threshold which would result in a higher charge. In this case the response team will need three sample bottles to contain all of the material. These three bottles should be labeled in such a way that it is clear to the chemist, as well as the court, that they did originate from one container. (i.e. Item 24A, 24B and 24C.) This should also be photographed to clarify this idea. Copies of the log sheet and photos should accompany the evidence to the lab.

Prior to bringing these items to the lab it is helpful for them to be packaged in evidence bags that are well labeled. All items should then be placed in a container which will be used to transport the evidence to the lab. An ideal container is a plastic evidence bucket, approximately 5 gallons in size, and which vermiculite has been added for the items to rest in without over crowding. As packaging material, vermiculite is particularly suited for use with corrosive and flammable chemicals. It is light, clean, and easily poured around irregular shaped objects; and it provides an excellent cushion against impact shock. The material also will help to absorb fumes such as ammonia which may come from the sampled materials. These buckets help protect the evidence and provide a convenient container for transport. If many items are to be sent to the lab or they are very large, multiple buckets should be considered.

All samples should be hand-delivered to the lab ASAP. Care should be taken as to where these samples are stored if they are not delivered immediately to the lab. Extreme changes in temperature, particularly heat could be dangerous for storing and transporting these materials.

Additional recommendations for safety and good practices

Care should be taken when working a clandestine lab scene if there are reaction vessels present. These are often still "cooking" or reacting and it may be dangerous to stop the reaction. Care must also be taken as often the material in these vessels can initiate a fire. This is due to the sodium and lithium metals which can ignite when exposed to moisture and the flammable solvents used for the extraction of the drugs. The combinations can be very dangerous.

The person who transports and submits the samples should be knowledgeable about the crime scene, the samples submitted, and the packaging of the items. Ideally someone who was at the original crime scene and assisted with the sampling and packaging will accompany the samples to the lab. If this is not possible, the person transporting and submitting the evidence should have enough knowledge about the items to discuss them with personnel at the lab. Most clan lab cases will be screened when they arrive at the lab to evaluate the items submitted and make certain they have the proper packaging. It is at this time the forensic staff may have questions about the sampling at the scene and the items themselves. The chemist may need to be able to discuss the case with someone knowledgeable about the evidence.

Depending on the laboratory system, it may be required that the submitting agent or agency call the forensic lab and let them know if a clan lab is going to be arriving, or schedule a time when the agency can submit their evidence. This is often required so that the lab can be sure the appropriate staff at the lab is working. These evidence submissions often are screened before they will be accepted at the lab. If the appropriate staff who screen labs are out for any reason, the clan lab evidence may not be accepted.

If lithium or sodium metal must be submitted, a small quantity should be placed in a bottle assembly with Teflon-lined caps and the sample should be covered with mineral oil to prevent contact with moisture and combustion of the metal.

All items from the scene will most likely be treated as hazardous waste. The materials must be managed through an appropriate hazardous waste disposal contractor. Check with your local jurisdictions for appropriate hazardous waste regulations.

Summary

There are references and classes available for the crime scene personnel in how to work the scene for safety and hazmat teams for disposal of the materials. What has been presented in this material is specific for assisting in proper sampling and packaging at the scene as well as transportation of the evidence to the lab. Some lab personnel will respond with officers to the scene and can help on location. However, due to the required training involved, low staffing, and low budgets at many labs, many no longer have the resources to respond to the scene. Thus, the lab is very dependent on good sampling by the crime scene officers. It is critical that the Clan Lab Response Teams are well trained in working this particular type of evidence. They need to know what samples are needed for analysis to meet the elements of the crime from the legal standpoint. There can be many hazards at these scenes, both physical and chemical, and therefore proper training is critical.

Consideration must be made when dealing with clan labs scenes as there can be child endangerment charges. Along with controlled substance laws, know what samples and or documentation might be needed to meet these additional charges.

References for Additional Reading

1) Virginia Department of Forensic Science

   http://www.dfs.virginia.gov/services/controlledSubstances/methLabs.cfm

2) NES – Clandestine Laboratory First Responder Field Guide

   http://nesglobal.net/clan_lab

3) Clandestine Laboratory Investigators Association - www.clialabs.com