



**Smoke Detector's
Saves Lives.**



**Shenandoah County
Fire Marshal's Office**

**SHENANDOAH
COUNTY'S METH LAB
CLEAN-UP
ENFORCEMENT AND
HOW IT CAME ABOUT**



**Smoke Detector's
Saves Lives.**



**Shenandoah County
Fire Marshal's Office**

Introductions

- **Name**
- **Agency**
- **Experience with Meth Labs**

Background



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Two charged with possessing, manufacturing meth

Two women were arrested and indicted Monday under suspicion of the manufacturing and distribution of methamphetamine, said Lt. Chris Baker of the Shenandoah County Sheriff's Office.

By Jake Zuckerman Jun 22, 2016

Meth maker sentenced

A Mount Jackson man was sentenced to 10 years in prison after pleading guilty Wednesday in Shenandoah County Circuit Court to 10 of 12 counts stemming from the manufacturing of methamphetamine.

By Joe Beck Oct 20, 2015

Meth precursors found in search

A search warrant was executed against an Edinburg man Tuesday who has been charged with inadvertently discharging a firearm in a building and the reckless handling of a firearm. The search led to the seizure of the weapon and ammunition, along with drug paraphernalia and several methamphetamine precursors.

By Jake Zuckerman Oct 20, 2016



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Fire marshal evacuates home after authorities find meth lab

By Alex Bridges The Northern Virginia Daily Sep 20, 2019

Judge sentences couple for making meth in 2013

WOODSTOCK – A New York couple received suspended prison sentences for running a methamphetamine laboratory in Shenandoah County in 2013.

By Alex Bridges Jan 29, 2018

Sheriff's Office looking for leads in meth dumpsite probe

By Briahanna Brown Jun 8, 2017

The Shenandoah County Sheriff's Office is asking for the public's help in solving an investigation into a methamphetamine laboratory dump site...

Authorities find suspected meth lab in Edinburg

WOODSTOCK – A Shenandoah County man accused of running a methamphetamine laboratory at his Edinburg apartment remains in jail.

By Alex Bridges Jul 30, 2018



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Authorities to test jug for meth chemicals

Authorities await test results of chemicals found in a jug in New Market this week.

By The Northern Virginia Daily Nov 19, 2013

Woman faces prison for making meth near children

WOODSTOCK – A Shenandoah County woman pleaded guilty Wednesday to charges of making methamphetamine near children at her home in 2016.

By Alex Bridges Jul 31, 2018

Four face charges in meth bust

Shenandoah County authorities arrested four males in New Market Sunday evening and charged them with offenses stemming from the operation of a methamphetamine laboratory.

By The Northern Virginia Daily Sep 23, 2013

Authorities: Meth found in house that caught fire

By Alex Bridges The Northern Virginia Daily Oct 18, 2019



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Two arrested at suspected meth lab

Shenandoah County authorities arrested two people at a suspected methamphetamine laboratory Wednesday afternoon near Mount Jackson.

By Joe Beck Mar 10, 2015

Man gets prison for making meth

A Shenandoah County man must serve prison time for operating a mobile methamphetamine laboratory in his car.

By Alex Bridges Mar 18, 2015

Man charged with meth making, possession

Strasburg police arrested and charged a man whom they believe was in the midst of making methamphetamine in his car when they stopped him early Wednesday morning in an isolated part of town.

By Joe Beck Dec 16, 2015

Two more arrested in meth bust

Shenandoah County sheriff's deputies have arrested two more people on drug and gun charges stemming from the execution of a search warrant at a suspected methamphetamine laboratory near Mount Jackson.

By Joe Beck Aug 30, 2015



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Meth seizures surge in Shenandoah County

The amount of methamphetamine seized in Shenandoah County soared in 2015 as activities associated with the drug shifted away from trafficking to production in small, mobile laboratories.

By Joe Beck Feb 9, 2016

Two arrested, charged in meth bust

An Edinburg couple is facing several counts related to making and selling methamphetamine following an arrest at their home on Feb. 17.

By Joe Beck Feb 22, 2016

Police investigate suspected meth lab

Town police detained a 46-year-old West Virginia man after stopping his car Wednesday morning and finding what they believe to be evidence of a mobile methamphetamine laboratory inside.

By Joe Beck Dec 15, 2015

Meth probe leads to Strasburg residence

By Alex Bridges The Northern Virginia Daily Oct 1, 2019



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Police say meth lab and bomb making going on at Strasburg home

An alleged King Street meth lab was shut down by town, state and federal officers Wednesday afternoon in Strasburg.

By The Northern Virginia Daily May 15, 2012

Meth lab discovered in Mount Jackson, one arrested

Shenandoah County Sheriff's Office personnel executed a search warrant of suspected methamphetamine lab Saturday and Sheriff's Office investigators assigned to the Northwest Regional Drug Task Force subsequently discovered an active laboratory at 6367 Railroad St. in Mount Jackson.

By Nathan Budryk Mar 20, 2017

Two charged with manufacturing meth, child endangerment

A New Market woman and an Edinburg man were indicted Wednesday on charges of manufacturing methamphetamine, child endangerment and other counts.

By Jake Zuckerman Jul 14, 2016



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Police bust meth operation near Mount Jackson

The Shenandoah County Sheriff's Office arrested four Shenandoah Valley residents on several charges related to manufacturing and possessing methamphetamine this week.

By Kevin Green Aug 26, 2015

Police: Meth labs scaling down size

Methamphetamine operations are becoming smaller and more numerous in Page and Shenandoah counties, the head of the Northern Virginia Regional Drug Task Force said Thursday.

By Joe Beck Mar 11, 2015



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Another suspected meth lab busted in Shenandoah County

For the second time in less than a week, Shenandoah County drug investigators have raided a suspected meth lab.

By The Northern Virginia Daily May 20, 2012

Special teams trained in meth lab response

With the recent resurgence of suspected meth labs in the area, a regional methamphetamine response team has seen increased use.

By The Northern Virginia Daily May 22, 2012

Man rearrested within three hours of release

A Strasburg man is back in jail for possessing ingredients for methamphetamine production within hours of his release from jailtime on similar charges.

By Rachel Mahoney Feb 21, 2016



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Defendant accused in meth lab operation arrested

WOODSTOCK — Shenandoah County Sheriff's Office deputies Tuesday arrested the last of three men accused of involvement in a methamphetamine operation based in a home near Edinburg.

By The Northern Virginia Daily Oct 21, 2013

Two men arrested during meth bust

Law enforcement officers from two agencies in Shenandoah County arrested and charged two men Wednesday with manufacturing methamphetamine out of their homes in Edinburg.

By The Northern Virginia Daily Nov 1, 2012

Accused meth maker faces theft charges

The Strasburg man accused of running a meth lab and bomb factory out of his King Street house was charged with three more crimes on Thursday.

By The Northern Virginia Daily May 16, 2012



**Smoke Detector's
Saves Lives.**

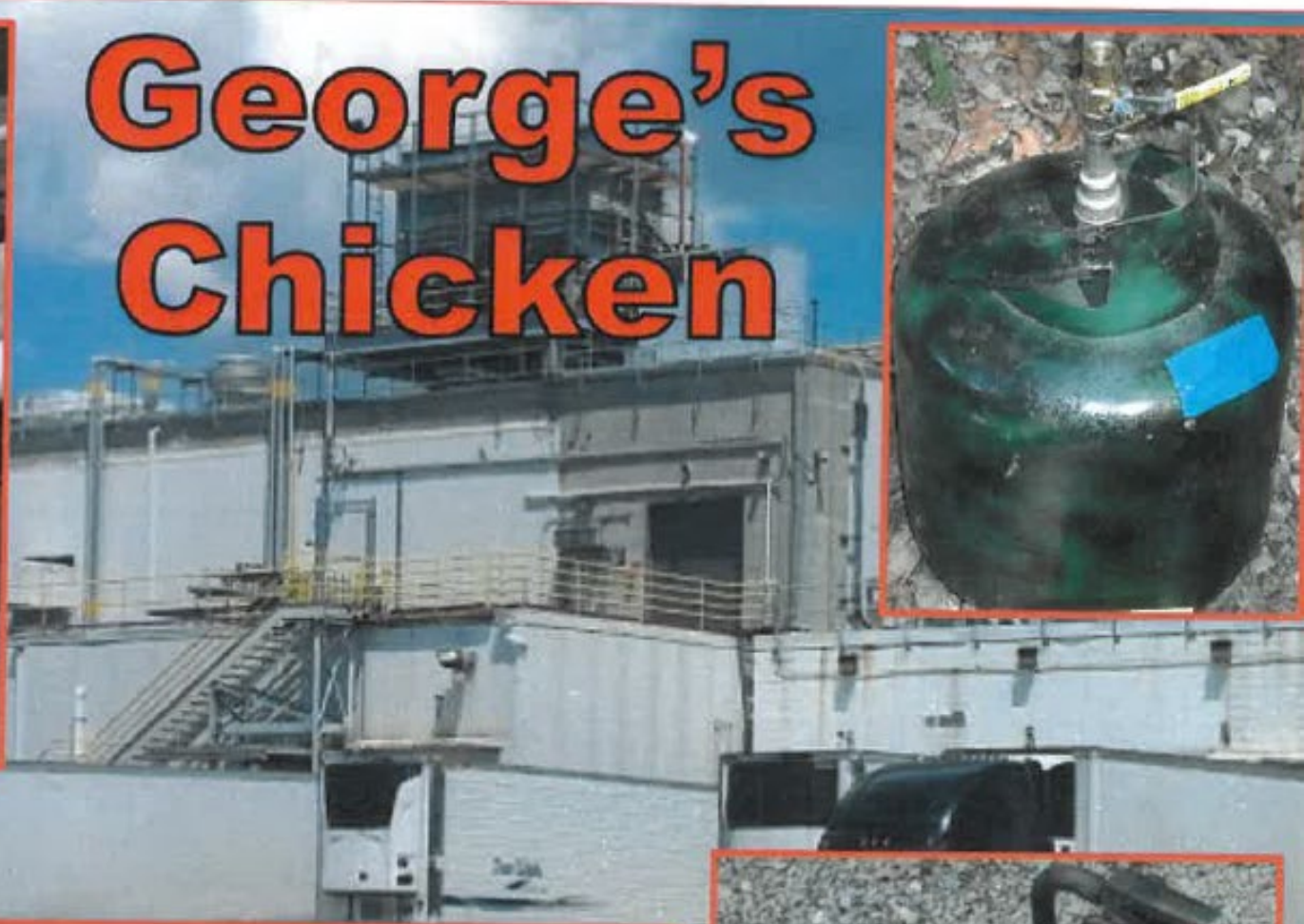


Shenandoah County Fire Marshal's Office

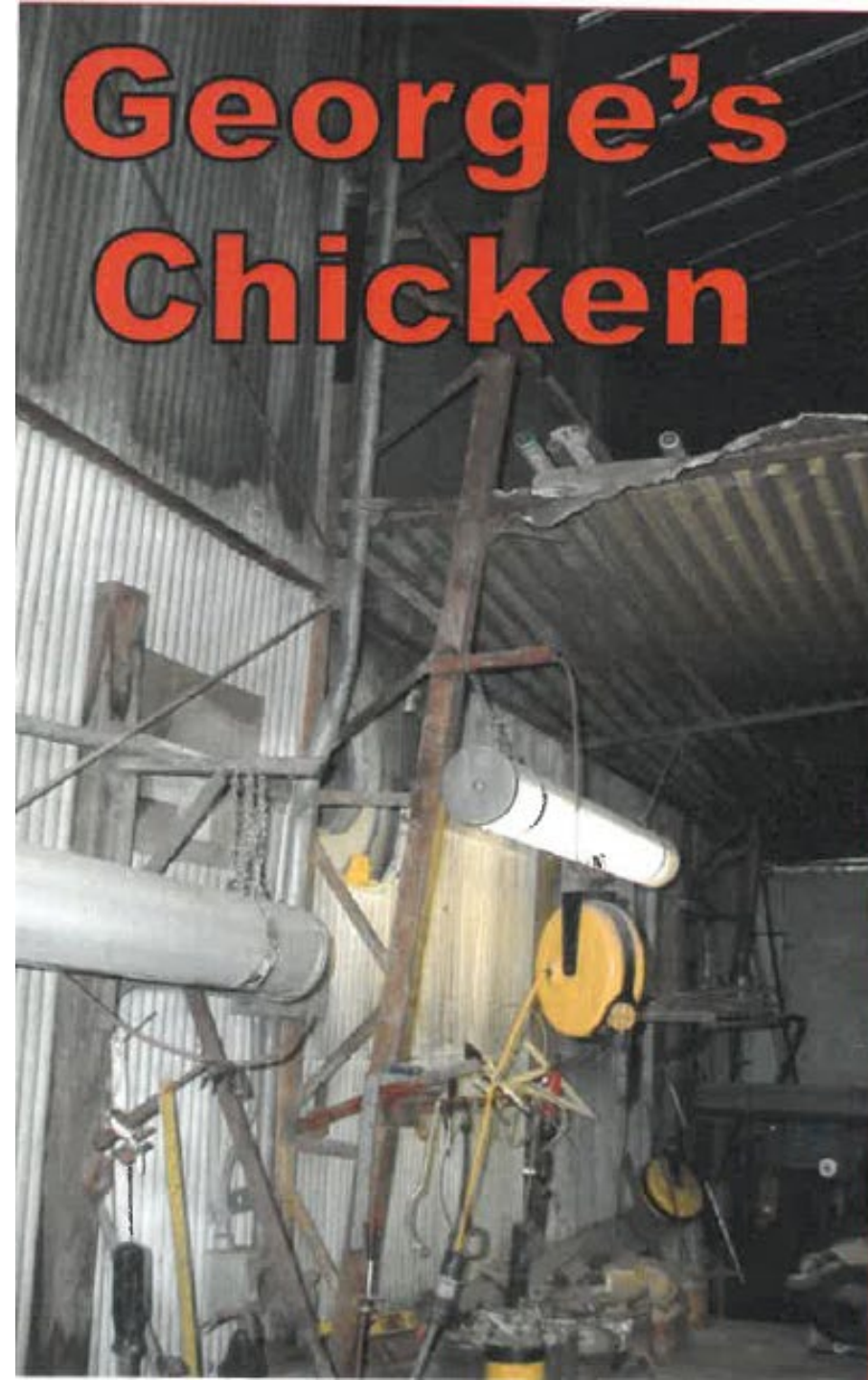


**1ST METH
LAB**

George's Chicken



George's Chicken



New Market Poultry
New Market, Virginia



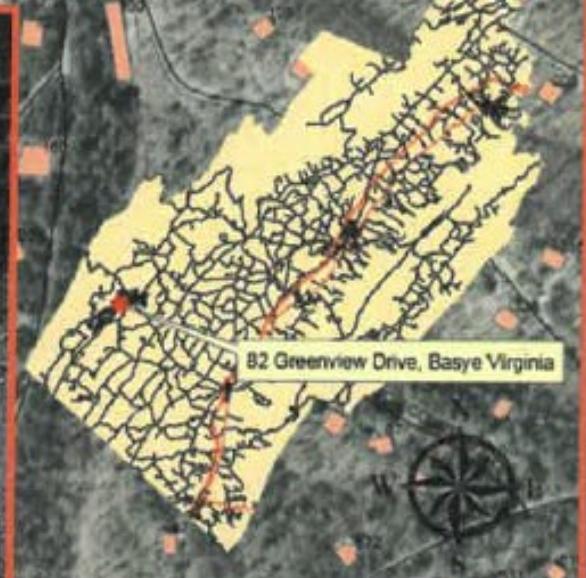
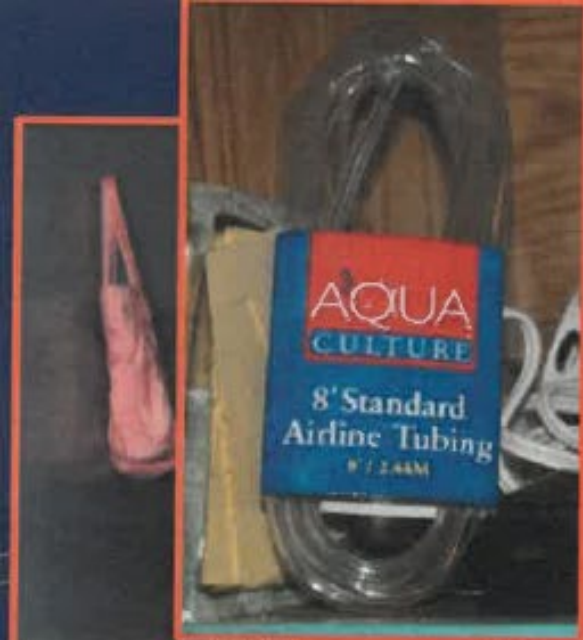
Anhydrous Ammonia Tank



Shop

New Market Poultry






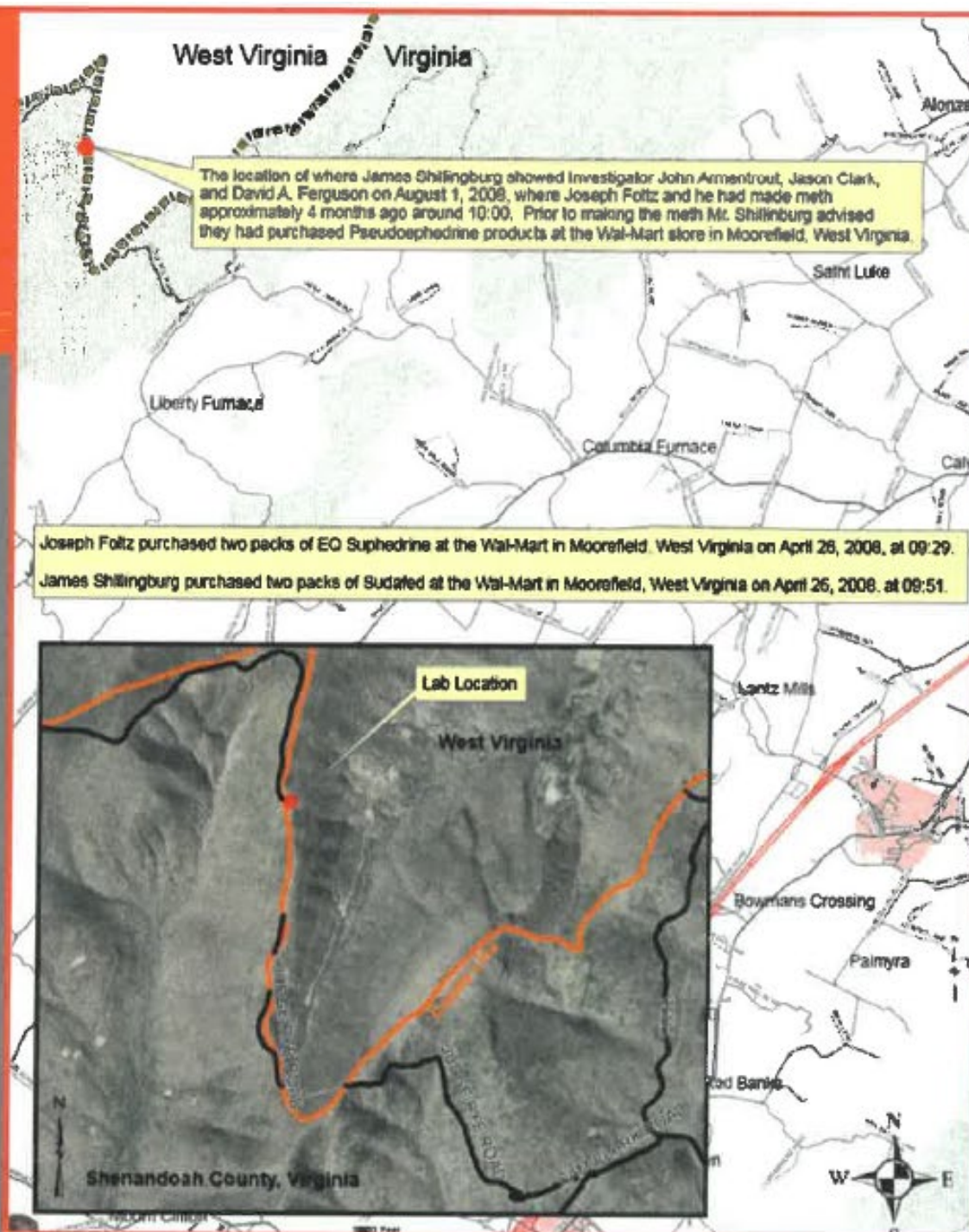
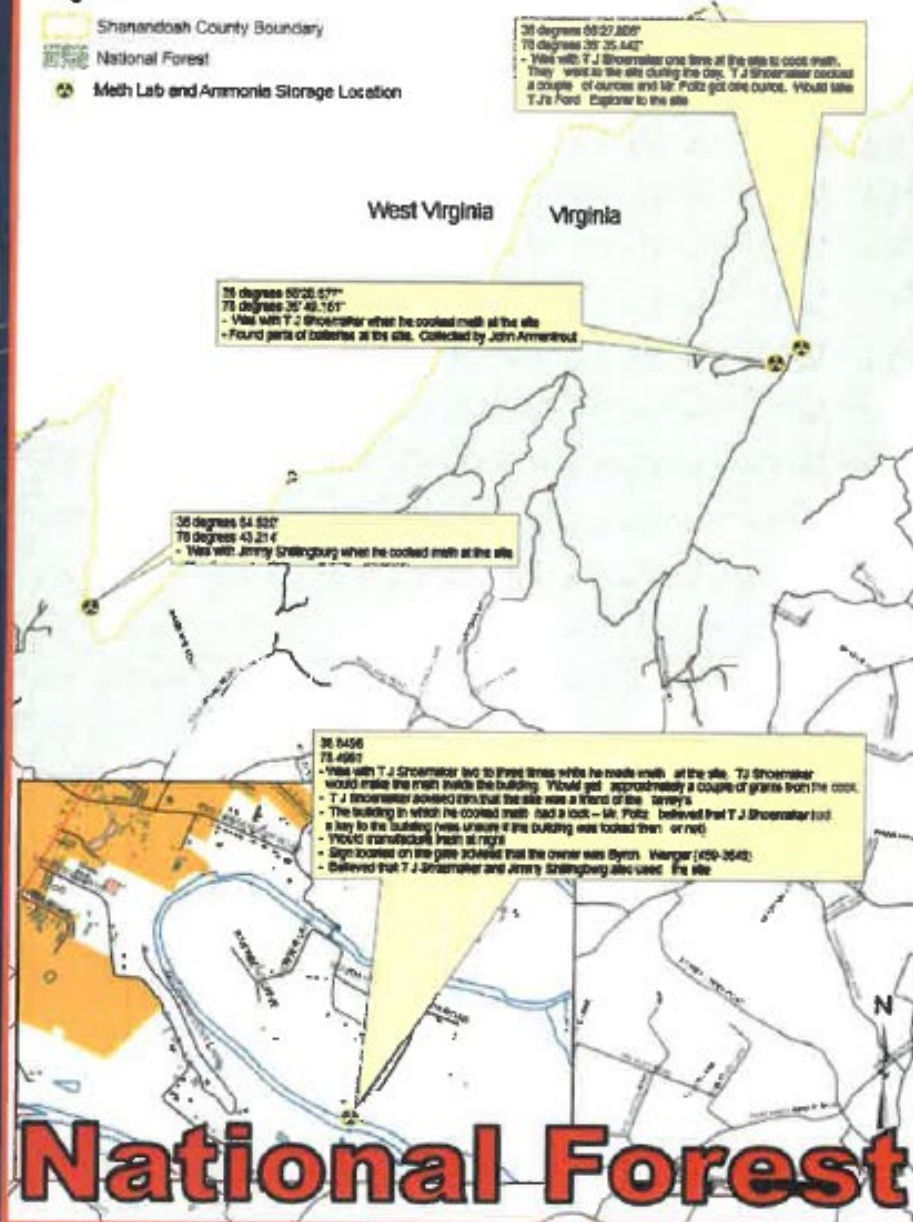




September 8, 2008 interview with Joey Foltz
Below are the locations Mr. Foltz advised meth was made

Legend

-  Shenandoah County Boundary
-  National Forest
-  Meth Lab and Ammonia Storage Location



**Manda Funkhouser location
and items found
in the rear of her vehicle**

Legend

-  National Forest
-  Shenandoah County Boundary

36 degrees 54.927
75 degrees 43.162

Campsite that Manda Funkhouser (CLP E861947) was located at on August 5, 2006. Ms. Funkhouser was driving a Green pickup truck with West Virginia plate AED413. Ms. Funkhouser had stayed the night at the campsite after getting into an argument with her husband Anthony. While at the site she had cleared the area up and found several items such as: two black golf balls, 1) one gallon camping fuel can, and several soda cans.

- David A. Ferguson collected 1) one gallon camp fuel container from the rear of Ms. Funkhouser vehicle.





National Forest



SPRICKLE

SCRE'S ROAD

Legend

-  National Forest
-  Shenandoah County Boundary
-  National Forest Roads
-  Cylinder Location



Location of two cylinders found on December 4, 2006
around 16:00

Found by: John Armentrout and David A. Ferguson

Location: Crooked Run Road
75 degrees 47'52.886"W
38 degrees 55'43.342"N

National Forest



Approximately 80 People Involved



Tracking the moves they make

Timmy R. Shoemaker Jr.

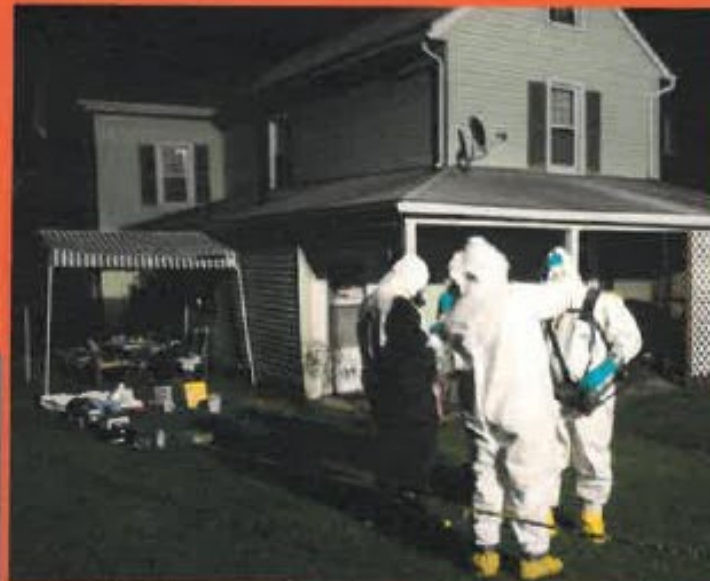
Incident #: 08-82-051486

Date of Incident: 07-08-2008

Location: 201 North Main Street Apt. A
Woodstock, Virginia 22664

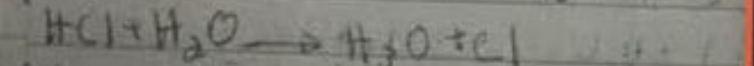


Support
The
16's
Madness



This is done in a small wash
bottle and the gas is pumped to
sulfuric acid before it is
then your (MA) solution.
HCl

Upon contact $H_2O + HCl$ combine
form Hydronium cations and chlorine
anions. It is a reversible chem
reaction



The resulting solution is called hydro
chloric acid. This means it
dissociates or ionizes most all completely.

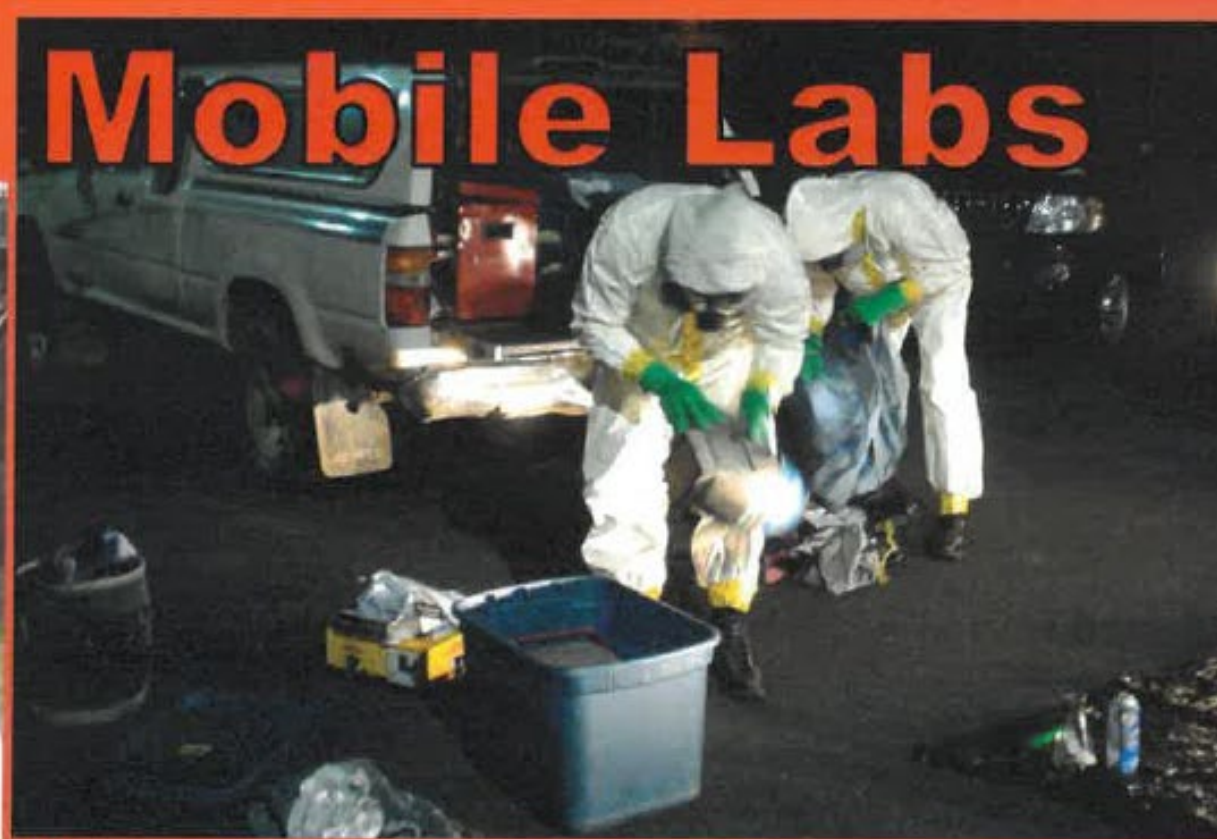
Proffer



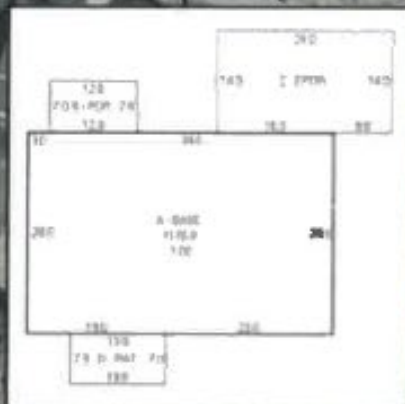
Mobile Labs



Mobile Labs



416 Crim Drive, Strasburg



David A and Jodi D Pryor
Tax Map # 025 A4 A 207
Total Assessed Value: \$178,500

Interior:
of Rooms: 6
of Bathrooms: 3
Square feet: 1176
Basement Square feet: 1176 568 finished square feet

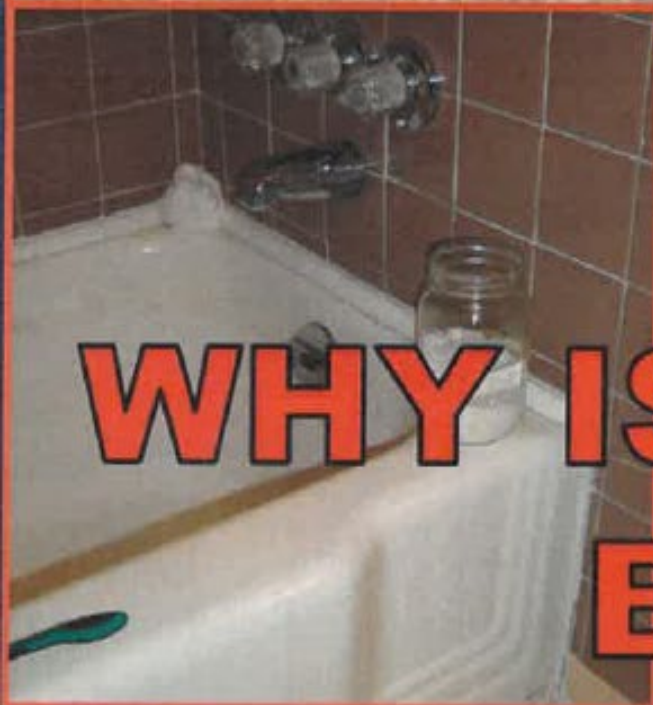
Mobile Labs



Dave Mason



64 Gray Owl Lane



**WHY IS SOMETHING NOT
BEING DONE?**

Drug Enforcement Administration



Guidelines for Law Enforcement for the Cleanup of Clandestine Drug Laboratories



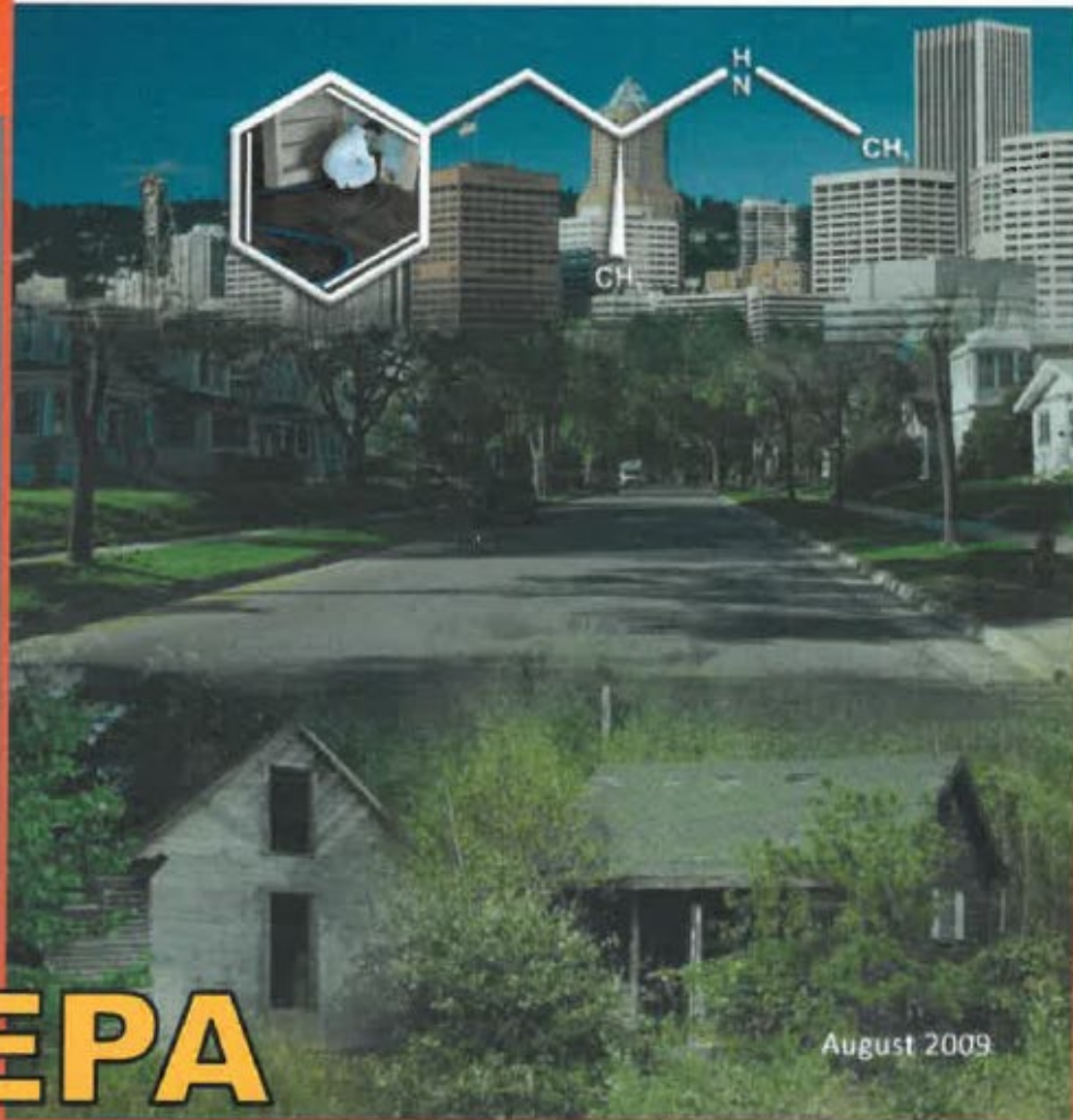
DEA

2005 Edition



U.S. Environmental Protection Agency

Voluntary Guidelines for Methamphetamine Laboratory Cleanup



EPA

August 2009

Purpose

The purpose of this document is to provide compliance assistance to homeowners, contractors, State and local officials, law enforcement personnel and others in Virginia that generate and/or manage by-products and wastes associated with clandestine or illegal methamphetamine (meth) labs and information on how those discarded materials may be managed to meet applicable requirements of the [Virginia Hazardous Waste Management Regulations](#) (VHWMR).

This information is provided for compliance assistance purposes only by the Virginia Department of Environmental Quality (DEQ). This is not a regulation and, therefore, does not add, eliminate, or change any existing regulatory requirements. The statements in this document are intended for informational purposes only.

Introduction

The operation and cleanup of an illegal meth lab may result in a myriad of materials that must be characterized and disposed of properly. Such materials can include containers of chemicals to be used in the production process, by-products of the production process, as well as lab equipment and apparatus. In addition, contaminated building materials such as wallboard, insulation, carpets, furnishings, and appliances may also require disposal. Further contaminated materials may be generated in the form of soil and/or groundwater from the improper disposal of meth lab by-products or wastes by the producers of the meth. Meth lab wastes may have been poured into the indoor plumbing drains that flow to individual sewage treatment systems (e.g., septic systems) on the property, or allowed to drain directly onto the soil near the meth lab. Contaminated soils and groundwater could also result from the burning or burial of meth lab wastes on the property.

Waste Disposal - Virginia Governing Regulatory Authorities under DEQ

Disposal of hazardous waste is regulated under the VHWMR, through adoption of the Federal Resource Conservation and Recovery Act, Subtitle C, by reference. The general provisions of the regulations require generator responsibility for "cradle-to-grave" management of their hazardous waste.

Although certain hazardous materials may be involved in the operation and waste by-products of meth labs, hazardous wastes are a subset of solid wastes that are defined by the regulations in [40 CFR Part 261](#). Even though a material may be considered a "hazmat," it does not necessarily follow that it is regulated as a hazardous waste.

Additionally, some wastes may be exempted from more restrictive regulation and management as hazardous waste through definitions and exclusions under 40 CFR Part 261. This may include materials disposed of through a POTW (in accordance with specified regulatory provisions), household hazardous wastes, and discarded materials that are not a listed hazardous waste or do not exhibit a characteristic of a hazardous waste even though they may be a "hazmat" or are derived from such materials. Under Virginia's regulations, however, a waste generator may voluntarily declare any of his waste to be a

DEQ

DEQ Hazardous Waste Program Hazardous

Waste Identification of Methamphetamine Production Process By-Products

Best Practices protocol for use by law enforcement and emergency response agencies regarding the clean-up of abandoned and deactivated methamphetamine production sites and the retention and handling of the byproducts of methamphetamine production

1. Investigation

- The initial investigation of potential illicit methamphetamine production and distribution is the joint responsibility of Local Law Enforcement ("LLE") entities and the Virginia Department of State Police ("VSP").

2. Discovery of potential clandestine laboratory by personnel other than law enforcement

- Upon identifying a potential clandestine laboratory, First Responders arriving at a site will immediately notify LLE of the potential discovery of a clandestine laboratory.

3. Initial action by law enforcement personnel

- LLE will respond when notified, secure the perimeter of the site, and notify Certified Clandestine Lab Response Personnel.
- Responding officers will provide for the immediate evacuation of the site and attempt to secure the site.
- An initial safe perimeter will be established at a minimum of 150 feet from the potential laboratory site.
- Responding officers will notify fire and rescue to stand by for support services.
- If children or vulnerable adults that are disabled due to mental or physical health needs are present, have been present recently, or are known to reside at the clandestine laboratory site, the Department of Social Services ("DSS") will be notified immediately. Responding personnel from DSS will provide clean size- and age-appropriate clothing for those exposed to the clandestine laboratory. If appropriate clothing is not available, DSS will arrange for disposable Decon Clothing Kits for these individuals. Exposed children and vulnerable adults will be provided medical treatment, to include bathing and medical screening. Potentially contaminated clothing will be processed by the law enforcement personnel processing the site and be destroyed.
- LLE entities without Certified Clandestine Lab Response teams and adopted Safety and Health Programs will notify Certified Clandestine Lab Response

4. Entry and response

- No individual or agency will intentionally enter or authorize entry into a suspected clandestine laboratory without adoption of an entity-specific Standard Operating Procedure ("SOP") that provides for a Safety and Health Program as required by the Virginia Occupational Safety and Health ("VOSH") Program and in compliance with 16 VAC 25-90-1910.120 (HAZWOPER) Standards and/or Safety and Health Program as required by OSHA and Federal Regulation 29 CFR 1910.120 (HAZWOPER) Standards.
- No action related to processing or dismantling of a discovered clandestine laboratory shall be undertaken without the presence of a certified and designated Site Safety Officer.
- The site will be processed pursuant to the law enforcement entities' SOP governing clandestine laboratory responses.
- Any officer who has contact with a clandestine laboratory site shall file an injury report for documentation purposes.
- The Site Safety Officer or Certified Clandestine Lab Supervisor will contact the DEA's regulated clean-up contractor to make arrangements for the removal of the gross contaminants from the site. Appropriate personnel from the responding entity will remain on-site until the cleanup contractor arrives and removes the contaminated items.

5. Safe packaging of evidentiary samples

- Only Certified Clandestine Lab Response Personnel shall collect samples from clandestine laboratories.
- A representative sample shall be removed from all precursors, reagents, and reaction vessels requiring analysis. Bulk items should be collected for analysis. Samples of those items shall be collected in a bottle assembly consisting

VSP

8. Actions subsequent to deactivation

- The entity deactivating a clandestine laboratory shall prepare and forward letters to the Virginia Department of Environmental Quality, the Virginia Department of Health, the Environmental Protection Agency and the property owner notifying them of the presence of hazardous chemicals. These notification letters shall state that hazardous substances were located at a particular address and that the gross contaminants were removed, but that hazardous substances and waste products may still be present at the property.
- The property owner shall be responsible for ensuring decontamination and remediation upon release of the site by the responding entity. Law enforcement entities will refer property owners to the local health departments for discussion and education related to remediation of the site.

- The Virginia Department of Health will disseminate this protocol to its local departments and will advise local departments of the resources available as guidance to affected property owners.
- DEQ will disseminate this protocol to its regional offices and will advise the regional offices as to the coordination of responses to inquiries from law enforcement entities related to disposal.

10. Dissemination to LLE and local health departments

- VSP, in coordination with the Office of the Attorney General, will facilitate the distribution of this protocol to LLEs.
- LLE entities with sufficient resources and a significant number of discovered clandestine laboratories shall be encouraged to adopt appropriate SOPs to facilitate response by local teams staffed with Certified Clandestine Lab Response Personnel.

**Does this
happen in
your area?**

Drug Labs in the United States

National Clandestine Laboratory Register Data

Displaying 241 - 260 of 823 results in the list view. The map view is limited to 500 data points.

This list contains addresses of some locations where law enforcement agencies reportedly found chemicals or other items, indicating the presence of either clandestine drug laboratories or dumpsites.

To filter the results, choose a state from the State dropdown column or date from the Date of Incident calendar column and then select the Filter button. The results are downloadable by selecting the Download Results button. To download the entire list: choose a state from the State column, select the Filter button and select Download Results. Repeat these steps for each individual state. Attempting to download results for ALL states by selecting ANY in the States column and selecting Download Results will result in an error message.

State*
Alabama

Date of Incident

Download Results Clear Filters Filter



<https://www.dea.gov/clan-lab>

DEA
Data
Base

GUIDELINES FOR CLEANUP OF RESIDENTIAL PROPERTY USED TO MANUFACTURE METHAMPHETAMINE

Overview

On April 18, 2012, Governor McDonnell approved legislation, introduced as [House Bill 796](#), which required the Board of Health to establish guidelines for the cleanup of residential property formerly used as clandestine methamphetamine laboratories. On March 20, 2013, Governor McDonnell approved additional legislation, introduced as [House Bill 1615](#), which expanded the scope of the guidelines to all residential properties where methamphetamine was manufactured. House Bill 1615 also established residential property disclosure notifications which have a delayed effective date of July 1, 2014.

The guidelines are based on input from the stakeholder working group, nationally recognized cleanup standards and relevant peer reviewed literature. The purpose of the guidelines are to provide cleanup procedures and standards determined by the Board of Health to be "best practices" reasonably calculated to assure that current and future property owners and occupants who follow the guidelines can remediate methamphetamine contamination to a level that does not pose a threat to persons occupying residential dwelling units in Virginia. The standards and procedures contained in these documents are guidelines; guidelines do not have the force of law and adherence is voluntary.

The Board of Health and its designees do not conduct inspections of residential properties to document or enforce compliance with these guidelines.



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

§ 55.1-708. (Effective October 1, 2019) Required disclosures; property previously used to manufacture methamphetamine.

Notwithstanding the exemptions in § 55.1-702, if the owner of a residential dwelling unit has actual knowledge that such residential property was previously used to manufacture methamphetamine and has not been cleaned up in accordance with the guidelines established pursuant to § 32.1-11.7 and the applicable licensing provisions of Chapter 11 (§ 54.1-1100 et seq.) of Title 54.1, the owner shall provide to a prospective purchaser a written disclosure that so states. Such disclosure shall be provided to the purchaser on a form provided by the Real Estate Board on its website and otherwise in accordance with this chapter.

2013, c. 557, § 55-519.4; 2016, c. 527; 2017, c. 386; 2019, c. 712.

§ 55.1-1219. (Effective October 1, 2019) Required disclosures for property previously used to manufacture methamphetamine; remedy for nondisclosure.

A. If the landlord of a dwelling unit has actual knowledge that the dwelling unit was previously used to manufacture methamphetamine and has not been cleaned up in accordance with the guidelines established pursuant to § 32.1-11.7 and the applicable licensing provisions of Chapter 11 (§ 54.1-1100 et seq.) of Title 54.1, the landlord shall provide to a prospective tenant a written disclosure that states such information. Such disclosure shall be provided prior to the execution by the tenant of a written lease agreement or, in the case of an oral lease agreement, prior to occupancy by the tenant.

B. Any tenant who is not provided the disclosure required by subsection A may terminate the lease agreement at any time within 60 days of discovery that the property was previously used to manufacture methamphetamine and has not been cleaned up in accordance with the guidelines established pursuant to § 32.1-11.7 by providing written notice to the landlord in accordance with the lease or as required by law. Such termination shall be effective as of (i) 15 days after the date of the mailing of the notice or (ii) the date through which rent has been paid, whichever is later. In no event, however, shall the effective date of the termination exceed one month from the date of mailing. Termination of the lease agreement shall be the exclusive remedy for the failure to comply with the disclosure provisions required by this section and shall not affect any rights or duties of the landlord or tenant arising under this chapter or other applicable law or the rental agreement.

Do you think this happens?

2013, c. 557, § 55.1-1218.12:3; 2016, c. 527; 2019, c. 712.



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

§ 32.1-11.7. Guidelines for cleanup of residential property used to manufacture methamphetamine.

The Board, in consultation with the Department of Environmental Quality and other relevant entities, shall establish guidelines for the cleanup of residential property and other buildings formerly used as sites to manufacture methamphetamine to certify that the methamphetamine level at such property is at or below the post cleanup target.

2012, c. [778](#); 2013, c. [557](#); 2014, c. [513](#).

Work group

Virginia Department of Health
Methamphetamine Cleanup Guidelines Work Group Meeting
October 9, 2014
D-R-A-F-T Summary

List of Attendees at Central Location

Jim Bowles-VDH	Dwight Flammia-VDH
Todd Grubbs-VDH	Rebecca LePrell-VDH
Leslie Romanchik-DEQ	Laura Farley-VA Realtors
Vernon Hodge-DHCD	

List of Attendees at Remote Locations

Heather Lyall Chad Bowman

1. Introductions

The meeting opened with brief introductions of work group members. Mr. Bowles stated the purpose for the work group is to review the Virginia Department of Health's (VDH) Guidelines for Cleanup of Residential Property Used to Manufacture Methamphetamine (the Guidelines) and determine the necessary revisions to comply recent amendments to Va. Code Section 32.1-11.7. These recent amendments essentially require VDH to apply the Guidelines to all buildings, and to determine a method for certifying that the methamphetamine level is at or below the post cleanup target level.

Mr. Bowles then outlined the process for the work group. The work group will draft proposed Guidelines for the State Health Commissioner's for approval. The draft Guidelines will then go to the Board of Health for final approval. Mr. Bowles emphasized that the Guidelines are voluntary; VDH does not have regulatory authority regarding the cleanup of properties used to manufacture methamphetamine.

A hand-out of comments from Joseph Mazzuca was presented to the group (see attached).

2. Review Legislation

The workgroup discussed the recent amendments to Va. Code Section 32.1-11.7 and provided their initial thoughts on the direction for the work group. Mr. Bowles commented that VDH's initial thought is that the work group will develop procedures for a private sector third party to complete sampling and provide a "certification" to the owner. However, VDH does not have authority to license or certify specific companies to conduct clean up. Work group members had general agreement that the Guidelines would set the procedures and criteria for certifying that methamphetamine levels are at or below the target level, and only provide recommendations for who an appropriate third party might be to provide certification.

Work group members also discussed other sections of the Code of Virginia related to methamphetamine production, such as disclosure requirements in Va. Code Section 55-225.17 and 55-248.12:3.

There was general discussion on the scope of sampling, sampling protocols, sampling cost, and the appropriateness of the laboratories performing the test. The work group discussed different means for conducting third party sampling, including the use of certified industrial hygienist or homeowners purchasing kits and submitting samples with an outside party certifying that the sample was collected appropriately. Several members stated that the cost of sampling should be a major consideration. Each of these items related to sampling will require further discussion among the work group.

3. Define Deliverables

The work group identified the following task/deliverables:

- Review the Guidelines to assure that they apply to all structures, not just residential properties.
- Develop recommended post testing protocol.
- Establish recommendations for who should provide certification that a site is at or below the post cleanup target level.
- Develop a template certification checklist/letter.
- Review existing cleanup checklist in the Guidelines.
- Develop special considerations for hotels and motels.

One work group member also recommended that VDH confer with counsel to determine whether the amendments to Va. Code Section 32.1-11.7 allow VDH to set specific requirements for who can certify a site as being at or below the post cleanup target level, rather than just making recommendations.

Another work group member recommended that VDH set a lower post cleanup target level than the level currently provided in the Guidelines; 1.5 µg/100cm². There was general consensus among members present at the meeting that the current level is an appropriate health based standard.

There was also general consensus among members present that whoever performs the certification would provide a copy to the owner.

4. Assignments

- Review of the Guidelines – Mr. Bowles, Mr. Tuttle and Ms. Lyall.
- Develop recommended testing protocols – Mr. Bowman.
- Recommendation for certification providers – work group.
- Create a template certification checklist/letter – Mr. Gregory.
- Review existing cleanup checklist – Mr. Bowles.
- Special consideration for hotels/motels – Ms. LePrell and Dr. Flammia

5. Schedule Next Meeting

1.5

**Guidelines for Cleanup of Residential Property
Used to Manufacture Methamphetamine**

September 12, 2013

Virginia Department of Health

Virginia Department of Health

Table of Contents

Sections

I.	Background	1
II.	Definitions	1
III.	Health Concerns Related to Manufacture of Methamphetamine	2
IV.	Methamphetamine Contaminants	2
V.	Methamphetamine Site Cleanup	4
VI.	Methamphetamine Testing	18
VII.	Re-Entry into the Residential Dwelling Unit and Property Owner Notification	18
VIII.	References	19

Appendices

A.	Methods of Methamphetamine Production	21
B.	State Methamphetamine Cleanup Guidelines and Standards	24
C.	Fate and Transport of Chemicals Associated with Methamphetamine	29
D.	Cleanup Checklist	30
E.	Code of Virginia Excerpts Related to Methamphetamine Cleanup and Notification	31
F.	Administration Review	32

Tables

1.	Chemicals and hazards associated with the one-pot/ammonia-reduction method	3
2.	Chemicals and hazards associated with the red phosphorous method	3
3.	Decision aid for determining whether to salvage or discard an item	9
4.	Tests, chemicals, locations and guidelines for sampling	12
5.	Important contacts	19

I. Background

On April 18, 2012, Governor McDonnell approved legislation, introduced as House Bill 796 by Delegate Nick Rush, which required the Virginia Board of Health (Board) to establish guidelines for the cleanup of residential property formerly used as clandestine methamphetamine laboratories. After the law became effective on July 1, 2012, the Virginia Department of Health (VDH) convened a working group to develop a set of draft guidelines for review and approval by the Board. Along with staff from VDH, this workgroup included representatives from the Department of Environmental Quality, the Virginia State Police, the Department of Emergency Management, the Department of Housing and Community Development, the Town of Christiansburg, ServPro, and the Virginia Association of Realtors. On March 20, 2013, Governor McDonnell approved additional legislation, House Bill 1615, which expanded the scope of the guidelines to all residential properties where methamphetamine was manufactured as well as establishing residential property disclosure notifications. House Bill 1615 has a delayed effective date of July 1, 2014 to allow time for the Board's Guidelines to be established. The guidelines offered here represent the consensus of the participating members and their best efforts to assure the cleanup guidelines meet nationally recognized models put forth to prevent further contamination of residential property and to protect public health.

In the Southeastern United States, methamphetamine production by illicit or clandestine laboratories has been on the rise in recent years (Office of National Drug Control Policy, 2010). Methamphetamine manufacturing operations have been discovered in various settings including, but not limited to, occupied and abandoned houses, apartments, motel rooms, sheds, and motor vehicles. For the purposes of these guidelines, the cleanup recommendations are limited to residential properties.

The Board developed these guidelines based on nationally recognized standards, relevant peer reviewed literature and input from industry and governmental stakeholders and subject matter experts. It is important to emphasize that the standards and procedures contained in these documents are guidelines; guidelines do not have the force of law and adherence is voluntary. At the same time, the purpose of the Guidelines are to provide clean-up procedures and standards determined by the Board to be "best practices" reasonably calculated to assure that current and future property owners and occupants who follow the Guidelines can remediate methamphetamine contamination to a level that does not pose a threat to persons occupying residential dwelling units in Virginia. Nothing in these Guidelines shall be construed to establish a factual or proximate causal relationship between the risks associated with the manufacture of methamphetamine and any exposure or other injury sustained by current or future owners, occupants or inhabitants of residential dwelling units. In addition, the Board and its designees do not conduct inspections of residential properties to document or enforce compliance with these Guidelines.

II. Definitions

Methamphetamine means any substance which contains any quantity of methamphetamine, including its salts, isomers, and salts of isomers; methamphetamine is a schedule II central nervous system stimulant (base formula C10 H15 N).

Residential property or residential dwelling unit means a structure or part of a structure that is used as a home or residence by one or more persons who maintain a household including, but not limited to, a manufactured home.

III. Health Concerns Related to Manufacture of Methamphetamine

Several processes and many different combinations of chemicals made as 'recipes' are used to manufacture or 'cook' methamphetamine (See Appendix A). The release of these vapors presents a potential exposure hazard for occupants of the premises where the methamphetamine was manufactured. Each process uses and produces gases or vapors at some point during the cooking operation. The distribution of gases and vapors may be extended or spread by a building's heating, ventilation and air-conditioning (HVAC) system.

Both acute (short-term) and chronic (long-term) health hazards may result from the manufacturing of methamphetamine. Acute exposure hazards come from direct contact with product or waste and inhalation of product or waste. Burns, tissue irritation, and rashes can result from chemical spills, explosion, and direct skin contact with chemicals. Headaches, dizziness, nausea and other health effects can result from inhalation of vapors.

The potential for exposure to methamphetamine residues on surfaces and porous articles depends on accessibility of residues to surfaces and frequency of direct contact. The likely use of a contaminated area is an important factor in estimating frequency of contact. For example, residues in a kitchen or bathroom of a house will likely be contacted more frequently than residues in outdoor buildings such as unattached garages and sheds. Methamphetamine exposures may occur via dermal, ingestion or inhalation pathways. Methamphetamine residues may directly irritate the skin, or may be absorbed into the body through the skin, which may result in dermal exposure. If hand to mouth behavior occurs when hands have been in contact with toxic chemicals, the chemicals may be ingested into the body which may result in ingestion exposure. Hand to eye behavior may also introduce toxic materials to the eyes. Lastly, inhalation exposure may occur if vapors or associated chemical particles are breathed in.

IV. Methamphetamine Contaminants

The two primary methods generally used to manufacture methamphetamine are the One-pot/Ammonia reduction method (Table 1) and, to a lesser extent, the Red Phosphorous method (Table 2). Each method uses commonly found household products that, when used for household purposes, are generally considered safe. However, someone with a basic chemistry background and a good teacher can mix household products to make methamphetamine. In addition to making methamphetamine, hazardous chemicals that are produced in the manufacturing process may be corrosive, flammable, explosive, and toxic. Each pound of methamphetamine made can produce nine to eleven pounds of toxic waste. Methamphetamine "cooks" may dispose of toxic waste without any consideration to the environment or human health. Chemicals are commonly dumped in the sink, bath tubs, and outdoors and have the potential to pollute surface or groundwater supplies. Chemical spills and chemicals found in unmarked containers or stored improperly can put humans at risk of exposure.

Common chemicals used or produced by the One-pot/Ammonia reduction method and the associated health hazard include:

Table 1. Chemicals and hazards associated with the One-pot/Ammonia reduction method

Chemical	Potential Hazard*
Ammonia	Corrosive, toxic, flammable
Lithium	Reacts violently with water to produce hydrogen gas (explosive)
Pseudoephedrine/ephedrine	
Hydrochloric acid	Corrosive, toxic
Sodium hydroxide	Corrosive, toxic
Solvents (methanol, petroleum distillates)	Flammable, toxic
Sulfuric acid (salting process)	Corrosive, toxic

* These potential hazards identified are for the concentrated chemical and may not be applicable to the concentration of the chemical found in the source.

Common chemicals used or produced by the Red Phosphorus method and the associated health hazard include:

Table 2. Chemicals and hazards associated with the Red Phosphorus method

Chemical	Potential Hazard*
Red Phosphorous	Decomposes to phosphine gas in presence of moisture and oxygen, explosive when mixed with organic material
Iodine	Corrosive, reactive, toxic
Hydriodic acid	Corrosive, toxic
Hydrogen Peroxide	Supports combustion, reactive, explosive, toxic
Pseudoephedrine/ephedrine	
Sodium hydroxide	Corrosive, toxic
Hydrochloric acid	Corrosive, toxic
Solvents (methanol)	Flammable, toxic
Sulfuric acid (salting process)	Corrosive, toxic

*The potential hazards identified are for the concentrated chemical and may not be applicable to the concentration of the chemical found in the source.

After law enforcement seizes methamphetamine, there remains some low risk of exposure to chemical residues, particularly when the Red Phosphorus method is used. Chemical residues or gross contamination can often be identified by chemical odors, spills, staining, and opened containers of chemicals; however, residual contamination may remain on surfaces even after bulk chemicals and odors have been removed. Depending on the levels of any remaining contamination in the household and the method used to make methamphetamine, the property

owners should consider whether to allow persons inside the dwelling unit before a preliminary assessment has been made and any necessary clean-up has been completed in accordance with these Guidelines.

V. Methamphetamine Site Cleanup

A. General

The toxicity of methamphetamine residues depend upon the amount of the residue and the chemicals that make up the residue. The amount of residues depend upon the quantity of the methamphetamine manufactured, the period of time over which it was produced, the methods of chemical storage and disposal, the occurrence of chemicals, and the physical characteristics of the structure in which the methamphetamine was manufactured. The chemicals in the residue will vary with the method of methamphetamine manufacture (Appendix A).

The level and extent of contamination, and the type of contaminant material determines the necessary cleaning methods, and the likelihood that cleaning activities will be successful. For example, single cleaning events consisting of wash-rinse cycles may not be sufficient to remove contamination from household items; generally three wash-rinse cycles are recommended (USEPA, 2009). In some instances, it may often be more cost effective to discard porous furnishings (e.g. upholstery, carpet, draperies) rather than trying to clean them.

Cleaning of a residential dwelling unit should occur after the complete removal of bulk chemicals and hazardous materials has been made and law enforcement has removed any defensive measures (e.g. anti-personnel devices or "booby traps"). The Board recommends review of recommended cleaning procedures for specific items in the US Environmental Protection Agency *Voluntary Guidelines for Methamphetamine Laboratory Cleanup* ("EPA Guidelines") (USEPA, 2009).

B. Homeowner and Worker Safety

The Board recommends that no assessment or clean-up commence until law enforcement has secured the dwelling unit. A methamphetamine manufacturing operation may create health hazards, including the potential for explosion; some of these risks will be reduced by the law enforcement seizure activity.

Once seizure is complete, however, residents and other individuals should consider using Personal Protective Equipment (PPE) when initially re-entering the site, as chemical residue or other bulk materials used in the production process may still be present. Long sleeves, pants, and boots can be worn to minimize direct contact with remaining contaminants on site. A respirator (mask) can be used to minimize inhalation risks.

Adequate safety precautions should be taken by everyone who enters the structure before remediation is complete. In addition, persons conducting cleanup activities should wear appropriate PPEs to include protective clothing, gloves, eye protection, and respiratory protection. While these Guidelines only address assessment and clean-up related to

methamphetamine manufacturing operations, asbestos and lead may be present, particularly in older structures, and persons undertaking remediation activities should consider whether additional hazards may exist in the dwelling unit. Consultation with a professional who is trained to determine the risks and to recommend appropriate clean-up practices, policies and procedures is recommended.

Law enforcement personnel should follow the Virginia State Police 2005 Best Practices Protocol For Use by Law Enforcement and Emergency Response Agencies Regarding the Clean-up of Abandoned and Deactivated Methamphetamine Production Sites and the Retention and Handling of the Byproducts of Methamphetamine Production.

C. Interior Remediation

This section provides a general overview of a typical remediation sequence. The sequence outlined here assumes that law enforcement has already removed any bulk chemicals and manufacturing equipment. Removal of any bulk chemicals or manufacturing equipment should be coordinated with the responsible law enforcement agency, and transportation and disposal of chemicals must follow all applicable regulations.

Overview of the remediation sequence

1. Thoroughly ventilate the structure.
2. Perform a preliminary assessment.
3. Conduct any pre-remediation sampling determined to be necessary.
4. Develop a work plan based on the preliminary assessment and any sampling results.
5. Remove all contaminated materials that will be permanently discarded.
6. Thoroughly vacuum interior surfaces using a high-efficiency particulate air (HEPA) vacuum.
7. Complete an initial washing of interior surfaces.
8. Clean and seal the HVAC system. Do not operate the HVAC system again until all further remediation activities are completed.
9. Flush plumbing traps.
10. Use a detergent and water solution to wash ceilings, walls, floors and other non-porous items that will be kept.
11. Conduct any post-remediation sampling determined to be necessary.
12. Encapsulate ceilings, walls and floors.
13. Develop a final report.

1. Ventilation

Thorough ventilation of the structure should be done before, during and after remediation activities. Open all doors and windows and use fans, blowers or a negative air machine equipped with a HEPA filter. Do not use the HVAC system for ventilation—doing so may spread contamination to previously uncontaminated areas of the structure. Take precautions to avoid discharging exhaust air to air intakes of adjacent structures. After

the initial airing, ventilation must be continued throughout the decontamination activity. The property should be protected from adverse weather effects during this time period (e.g., rain, freezing temperatures, etc.). Venting will not remove methamphetamine residues and is not a cleanup method.

a. Pre-Remediation Ventilation

The site should be ventilated prior to the entry of cleanup personnel. In some cases, law enforcement personnel will have already ventilated the site before completing criminal investigation activities or the removal of bulk chemicals or manufacturing equipment. If the dwelling unit was sealed after these activities, the dwelling unit should be ventilated again before remediation occurs. Ventilation should be performed for a minimum of twenty-four hours and preferably forty-eight hours prior to undertaking further remediation activities.

b. Continued Ventilation

It is important to continue ventilation throughout the remediation process (except when it would interfere with air monitoring). To protect assessment or clean-up workers and to limit cross-contamination, leave windows open and use fans, blowers, or a negative air unit with a HEPA filtration system during the cleanup. A negative air unit equipped with a HEPA filtration system will limit or prevent the transfer of airborne contamination from dirty to clean areas.

c. Post-Remediation Ventilation

Ventilate the property for a minimum of two days after cleanup is completed. After cleaning and ventilating the property, recheck for new staining and odor (the presence of which would indicate that additional cleaning is necessary).

Preliminary Assessment

The purpose of a preliminary assessment is to obtain and document the information required to plan and carry out a remediation process for the specific dwelling unit. The preliminary assessment should include a review of records related to the methamphetamine manufacturing operation and a physical examination of the site to identify actual and potential hazards.

All available records related to the methamphetamine manufacturing operation should be reviewed. These records may include law enforcement reports and any waste removal documents. Relevant information acquired through this record review may include the duration of the methamphetamine manufacturing operation; the manufacturing process; the chemicals found on site; the location of "cooking", storage, and disposal areas; and sites of observed contamination.

After reviewing any available records relating to the methamphetamine manufacturing operation, the dwelling unit should be inspected to determine and document the actual

12. Post-remediation Sampling

The Board recommends sampling of the dwelling unit following the completion of all remediation activity. Such sampling provides evidence that the remediation activity was done in accordance with these Guidelines and that the dwelling unit has been successfully decontaminated. The health based standard for residual methamphetamine contamination on surfaces in dwelling units is 1.5 micrograms per centimeter squared ($\mu\text{g}/100\text{cm}^2$). This level is based on peer-reviewed scientific literature recommending a health-based exposure standard from California (Salocks, 2009). (See Also Appendix B); the literature indicates that a residual level of 1.5 $\mu\text{g}/100\text{cm}^2$ or less of methamphetamine contamination protects humans from negative health effects. As such, a residual level of 1.5 $\mu\text{g}/100\text{cm}^2$ or less of methamphetamine contamination meets the recommended safe level under these Guidelines.

Sampling should be done by a qualified professional and analyzed by a properly certified laboratory. Table 4 below contains recommended standards and possible locations for testing for volatile organic compounds (VOCs), metals (lead and mercury), corrosives (as a measure of pH) and residual methamphetamine. At a minimum, the Board recommends sampling for residual methamphetamine contamination in accordance with Table 4 at indoor locations where human contact with methamphetamine vapor or other chemicals may be likely to occur, including in any common areas of a multi-family community.

Sampling in accordance with Table 4 may also be conducted on a case by case basis at locations identified in the site assessment as demonstrating visual signs or other evidence of methamphetamine contamination.

Table 4. Tests, chemicals, locations and guidelines for sampling.

Test	Chemical(s)	Sampling Location	Guideline
VOCs	Benzene, Coleman fuel, naphtha, petroleum distillates	Indoor air, outdoor over contaminated soil, drains, septic systems	Less than 1 parts per million (ppm)
pH	Acids and bases	Food preparation areas, visible contamination, septic system, areas where chemicals stored	pH 6 to 8
Metals*	Mercury and Lead	Contact VDH	Contact VDH
Wipe sample	Methamphetamine	Case by case	1.5 micrograms per centimeter square ($\mu\text{g}/100\text{cm}^2$)
Visual	Iodine and red phosphorous	Stained area	Remove stained surfaces and appliances

*Two methods commonly used to make methamphetamine in Virginia do not require mercury or lead. If mercury and lead are identified, please contact the Virginia Department of Health.

For manufacturing operations utilizing the Red Phosphorous method, please consult the Virginia Department of Health for sampling guidance. In addition, consult the table in Appendix A for a list of some of the common contaminants associated with methamphetamine manufacturing using two of the most common methods.

13. Final Report

A final report documenting that the dwelling unit has been remediated according to applicable guidelines should be prepared by the clean-up contractor or other qualified professional. The final report should document all assessments, remediation activity, and post-remediation sampling completed at the dwelling unit, including the dates and the names of the persons who were in charge of each activity. A copy of the final report should be provided to the property owner.

The following items are suggested for inclusion in the final report:

- Physical address of the residential property and a description of the structures on the property;
- A summary of the pre-remediation site assessment, including any known information about chemicals that were present and removed from the site both before and during the remediation process, the methamphetamine production method, and any areas where contamination was observed;
- The names and qualifications of the clean-up contractor or other qualified professional and the laboratory that analyzed any samples;
- The cleanup plan and documentation that the cleanup was completed, including a description of the areas that were decontaminated and the methods used;
- The waste management procedures, including handling and final disposition of waste; and
- The sampling plan, a description of the sampling methods, a list of the areas sampled and the results of all laboratory analysis.

D. Recommendations for Specific Items and Materials

1. Walls

Remove and replace wall absorbent materials (e.g., drywall, plaster, wallpaper) that are visibly stained or are emitting chemical odors. Other smooth, painted surfaces should be washed as outlined above and should be encapsulated. Textured walls, especially those that were installed prior to 1980, may contain asbestos and should be tested for asbestos presence before cleaning or removal. Asbestos-containing materials should be addressed according to applicable guidelines.

VI. Methamphetamine Testing

It is cost prohibitive to test households for every chemical that could be used for the production of methamphetamine or that is generated as part of the cooking process. Also, many of these chemicals are present in commonly used household products. Because the long-term health effects of exposure to methamphetamine residue have not been firmly established, many states have adopted clean-up standards that are based on analytical detection limits. It is assumed that the cleaning method used to reduce a methamphetamine residues will also reduce other potential chemical contamination caused by methamphetamine production. In 2007, the California Department of Toxic Substances Control was the first government agency to develop a health-based remediation standard. The residual amount of methamphetamine allowed on surfaces in homes formerly used to manufacture methamphetamine is $1.5\mu\text{g}/100\text{cm}^2$.

While the Virginia Department of Health cannot recommend, endorse, license, or otherwise approve methamphetamine cleanup companies, the Virginia Department of Health does maintain a list of contractors that have indicated their ability to perform methamphetamine cleanup activities in Virginia.

VII. Re-Entry into the Residential Dwelling Unit and Property Owner Notification

It is recommended that the property not be rented, sold, or occupied until the assessment and cleanup following these Guidelines have been completed. It is further recommended that local building departments be contacted prior to remediation activity to ensure compliance with applicable provisions of the Uniform State Building Code (USBC) and any local ordinances such as public health nuisance ordinances. Additionally, §15.2-1716.2 of the Code of Virginia ~~authorizes localities to adopt an ordinance providing that persons convicted for manufacture of methamphetamine pursuant to §§18.2-248 or 18.2-248.03 of the Code of Virginia are liable at time of conviction or in a separate civil action to the locality or any other law enforcement entity for the cost of cleanup.~~

Effective July 1, 2014, if landlords of single-family or multi-family residential properties have actual knowledge that the dwelling unit was previously used to manufacture methamphetamine and has not been cleaned up according to these guidelines, the landlord must provide the prospective tenant a written disclosure with this information pursuant to §§55-225.17 and 55-248.12:3 of the Code of Virginia. In the case of the sale of a residential dwelling unit, if the owner of such property has actual knowledge that the residential property was used for the manufacture of methamphetamine and has not been cleaned up according to these guidelines, the

1.5

VDH has no
list on file as
of 2/28/2020

Regulated States	Standard	Sampling Requirements	Technology Based Standard
Arkansas	0.05/100cm ²	400/cm ² per room	Yes
Arizona	0.10/100cm ²	Per Consultant	Yes
North Carolina	0.10/100cm ²	Per Consultant	Yes
West Virginia	0.10/100cm ²	Per Consultant	Yes
Kentucky	0.10/100cm ²	400/cm ² per room	Yes – May require encapsulation
Tennessee	0.10/100cm ²	Per Consultant	Yes
Indiana	0.50/100cm ²	400/cm ² per room	Yes
Michigan	0.50/100cm ²	Per Consultant	Yes
Minnesota - Lab Site	0.10/100cm ²	Per Consultant with approval	Yes
Minnesota - Use Site	1.50/100cm ²	Per Consultant with approval	Requires Encapsulation or defaults to 0.1ug/100cm ²
Oklahoma	0.10/100cm ²	Per Consultant	Based on State Disclosure Law
Oregon	0.50/1FT ²	3FT ² , Discrete Only, Floors Only	Yes
Washington	1.50/100cm ²	Per Consultant	Yes
Idaho	0.10/100cm ²	300/cm ² in lab room - 100/cm ² all other rooms	Yes
Hawaii	0.10/100cm ²	Per Consultant	Yes
Alaska	0.10/100cm ²	Per Consultant	Yes
New Mexico	0.75/100cm ²	Per Consultant	Yes
Montana	0.10/100cm ²	Per Consultant with approval	Yes
South Dakota	0.10/100cm ²	Per Consultant	Yes
Nebraska	0.10/100cm ²	600/cm ² per room	Yes

Colorado	0.50/100cm ² 4.0ug/100cm ² 1.5ug/100cm ²	400/cm ² per room Attics and Crawl Spaces <u>Pre Encapsulated surfaces</u>	Health Based Standard
Wyoming	0.75/100cm ²	Per Consultant	yes
Utah	1.00/100cm ²	300/cm ² per room	Health Based Standard
California	1.50/100cm ²	400/cm ² per room	Health Based Standard

22 States Regulated
2 states go by 1.5

Current methods for methamphetamine production and toxic byproducts.

Method	Chemical Reaction	Chemical Contaminants	Hazard Category	Health Hazard Potential
Iodine/Red Phosphorus	Reduction of ephedrine	Phosphine Gas	Toxic Gas	<p>Acute: May cause lung irritation, cough, and chest tightness. Persons acutely exposed to phosphine may exhibit agitated, psychotic behavior. Signs and symptoms of acute phosphine toxicity may include rapid and/or irregular heart rate, low blood pressure, shock, nausea, abdominal pain, vomiting, diarrhea, and cardiac arrest.</p> <p>Chronic: May cause anemia, bronchitis, gastrointestinal symptoms (nausea, vomiting, abdominal pain, and diarrhea), and neurological effects (tremors, double vision, impaired gait, and difficulty speaking). Liver damage and jaundice, as well as renal failure are also potential consequences of long-term exposure to phosphine gas.</p>
	Reduction of ephedrine	Red Phosphorus	Flammable Solid	<p>Acute: May cause irritation of the skin, eyes, upper respiratory tract, gastrointestinal tract, and mucous membranes. Inhalation of red phosphorus dust may cause bronchitis. Ingestion of red phosphorus may also cause stomach pains, vomiting, and diarrhea.</p> <p>Chronic: Chronic exposure may cause kidney and liver damage, anemia, stomach pains, vomiting, diarrhea, blood disorders, and cardiovascular effects. Chronic ingestion or inhalation may induce systemic phosphorus poisoning.</p>

Method	Chemical Reaction	Chemical Contaminants	Hazard Category	Health Hazard Potential
	Production of Hydrogen Iodide	Iodine	Irritant Vapor	<p>Acute: Iodine vapor may cause eye, skin, nose and throat irritation, coughing, wheezing, and laryngitis. Exposure to high concentrations may result in airway spasm, chest tightness, breathing difficulty, severe inflammation, and fluid accumulation in the voice box, upper airways, and lungs. Some people develop allergic hypersensitivity to iodine vapor.</p> <p>Chronic: Studies of the effects of long-term inhalation of iodine vapors by humans are not conclusive. Studies in laboratory animals indicate that long-term inhalation of iodine vapor may disrupt thyroid function and reduces the ability of the lungs to take up oxygen. Adverse changes in the lungs of exposed animals may include edema, scaling of bronchial epithelium, and bleeding.</p>
	Production of Hydrogen Iodide	Hydrogen Sulfide	Toxic Gas	Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500ppm) may cause a loss of consciousness.
	Pseudoephedrine Extraction	Polar solvents (methanol or denatured alcohols)	Fire Hazard	
	Product Isolation	Strong Base	Corrosive Compound	

Method	Chemical Reaction	Chemical Contaminants	Hazard Category	Health Hazard Potential
	Methamphetamine Extraction	Coleman fuel, naphtha, lighter fluid, Freon, carbon tetrachloride, etc	Flammable (except freons or heavily chlorinated solvents—which are asphyxiants)	
	Methamphetamine Salting from Solvent Phase	Hydrochloric acid gas (HCl)	Corrosive compound	Acute: May cause irritation of the respiratory tract with burning, choking, coughing, eye irritation and severe burns. Ulceration of nose and throat may also occur.
One-pot/Ammonia Reduction	Reduction of ephedrine	Dry Lithium (from batteries)	Corrosive, Flammable and Water-Reactive Solid	May cause burns and pulmonary edema.
	Reduction of ephedrine	Ammonia	Corrosive Compound	Exposure to high levels of ammonia in air may irritate skin, eyes, throat, and lungs and may cause coughing and burns. Lung damage may occur after exposure to very high concentrations. Some people with asthma may be more sensitive to breathing ammonia than others. Swallowing concentrated solutions of ammonia may cause burns in the mouth, throat, and stomach.
All Methods		Methamphetamine Residuals	Controlled Substance	May cause chemical addiction, personality and behavior pattern changes

Appendix B. State Methamphetamine Cleanup Guidelines and Standards

A search for required and recommended sampling results to confirm successful remediation of methamphetamine manufacturing operations was completed using multiple Internet search engines. The search revealed **22** twenty-two states with mandatory residual standards for methamphetamine and one, North Carolina, with a recommended level. The results of these mandatory state cleanup guidelines and standards are listed below in **Table 17**. Seventeen states set required maximum residual levels for one or more precursors typically used for the illegal manufacture of methamphetamine, also found below.

Seven other states including Illinois, Iowa, Missouri, North Dakota, Ohio, Oklahoma and Wisconsin recommended that post-remediation testing in some circumstances. However none of these states provide sampling guidance and only one, Illinois, suggests a maximum post-remediation standard.

Cleanup Guidelines and Standards by State.

State	Chemical Test & Standard ¹									
	Methamphetamine ($\mu\text{g}/100\text{cm}^2$ unless otherwise specified)	VOCs ²	Lead	Mercury	Corrosives	Ephedrine; pseudo- ephedrine	Red Phosphorus	Iodine Flakes, Crystal	Tincture of Iodine	Amphetamine
Alaska	0.1	1ppm total hydrocarbon s & VOCs	2mg/100cm ²	5ng/m ³ in air	NV	NV	NV	NV	NV	NV
Arizona	0.1	NV	4.3 $\mu\text{g}/100\text{cm}^2$	3.0 $\mu\text{g}/\text{m}^3$ in air	6-8 pH	0.1 $\mu/100\text{cm}^2$	Removal of stained material or cleaned pursuant to standards		NV	NV
Arkansas	0.05	NV	3.21 $\mu\text{g}/100\text{cm}^2$	0.667 $\mu\text{g}/100\text{cm}^2$	NV	1860 $\mu\text{g}/100\text{cm}^2$	6190 $\mu\text{g}/100\text{cm}^2$	NV	NV	NV
California	1.5	NV	NV	NV	NV	NV	NV	NV	NV	NV
Colorado	0.5	NV	40 $\mu\text{g}/\text{ft}^2$	1 $\mu\text{g}/\text{ft}^2$	NV	NV	NV	22 $\mu\text{g}/100\text{cm}^2$ (if not removed)		NV
Connecticut	<0.1	<1ppm total VOCs in air	<40 $\mu\text{g}/\text{ft}^2$	<1 $\mu\text{g}/\text{ft}^2$	NV	<0.1 $\mu/100\text{cm}^2$	Removal of stained material	22 $\mu\text{g}/100\text{cm}^2$	Removal of stained material	NV
Hawaii	0.1	1ppm total hydrocarbon and VOCs in air	2 $\mu\text{g}/100\text{cm}^2$	50ng/m ³ in air	NV	NV	NV	NV	NV	NV
Kansas	1.5	NV	NV	NV	NV	NV	NV	NV	NV	NV
Idaho	0.1	NV	NV	NV	NV	NV	NV	NV	NV	0.5 $\mu\text{g}/100\text{cm}^2$
Indiana	0.5	NV	NV	NV	NV	0.5 $\mu\text{g}/100\text{cm}^2$	NV	NV	NV	NV
Kentucky	0.1	<1ppm total VOCs in air	NV	NV	6-8 pH		Removal of stained material			NV
Michigan	0.5	NV	40 $\mu\text{g}/\text{ft}^2$	1 $\mu\text{g}/\text{m}^3$	NV	NV	NV	NV	NV	NV
Minnesota	1.5	<1ppm total VOCs in air	40 $\mu\text{g}/\text{ft}^2$	<0.3 $\mu\text{g}/\text{m}^3$	NV	NV	NV	NV	NV	NV

State	Chemical Test & Standard ¹									
	Methamphetamine ($\mu\text{g}/100\text{cm}^2$ unless otherwise specified)	VOCs ²	Lead	Mercury	Corrosives	Ephedrine; pseudo- ephedrine	Red Phosphorus	Iodine Flakes, Crystal	Tincture of Iodine	Amphetamine
Montana	0.1	1ppm total VOCs in air	$20\mu\text{g}/\text{ft}^2$	$50\text{ng}/\text{m}^3$ in air	NV	NV	NV	NV	NV	NV
Nebraska	≤ 0.1	$\leq 1\text{ppm}$	$\leq 40\mu\text{g}/\text{ft}^2$	$\leq 300\text{ng}/\text{m}^3$	NV	NV	NV	NV	NV	NV
New Hampshire	0.1	1ppm total VOCs in air	$40\mu\text{g}/\text{ft}^2$	$1\mu\text{g}/\text{m}^3$	6-8 pH	$0.1\mu\text{g}/100\text{cm}^2$	Removal of stained material	Removal of stained material; $22\mu\text{g}/100\text{cm}^2$		NV
New Mexico	$1.0\mu\text{g}/\text{ft}^2$ (including precursors)	$\leq 1\text{ppm}$	$\leq 40\mu\text{g}/\text{ft}^2$	$< 0.3\mu\text{g}/\text{m}^3$	6-8 pH	NV	Discard stained material	Discard stained material	NV	NV
North Carolina	< 0.1 (recommended level)	NV	$4.3\mu\text{g}/100\text{cm}^2$	$0.3\mu\text{g}/\text{m}^3$	NV	NV	NV	NV	NV	NV
Oregon	$0.5\mu\text{g}/\text{ft}^2$ (composite samples)	NV	NV	NV	NV	NV	NV	NV	NV	NV
South Dakota	0.1	$< 1\text{ppm}$	NV	NV	6-8 pH	NV	Removal of stained material			NV
Tennessee	0.1 (on hard surfaces)	1ppm in air, measured under normal inhabitable conditions	$40\mu\text{g}/\text{ft}^2$	$50\text{ng}/\text{m}^3$ in air	NV	NV	NV	NV	NV	NV
Utah	≤ 1.0	$\leq 1\text{ppm}$	$\leq 4.3\mu\text{g}/100\text{cm}^2$	$\leq 0.3\mu\text{g}/\text{m}^3$	6-8 pH	$\leq 0.1\mu\text{g}/100\text{cm}^2$	No visible residue	No visible residue	NV	NV
Washington	< 0.1	1ppm total hydrocarbon & VOCs in air	$\leq 20\mu\text{g}/\text{ft}^2$	$\leq 50\text{ng}/\text{m}^3$ in air	NV	NV	NV	NV	NV	NV
West Virginia	0.1	NV	NV	NV	NV	NV	NV	NV	NV	NV

¹ Where indicated by the standard, a value is provided. If no value is provided, then "NV" is indicated denoting its absence.



**Smoke Detector's
Saves Lives.**



**Shenandoah County
Fire Marshal's Office**

I-Team Exposed Toxic Residue in Former Meth House



By ABC7

Tuesday, November 22, 2011



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office



https://www.youtube.com/watch?v=4oRNByW_5bk



<https://www.youtube.com/watch?v=E53TiFzdm2A&feature=youtu.be>



<https://www.youtube.com/watch?v=Sdy3gaD4TXk>



<https://www.youtube.com/watch?v=oo879XSd1I0&feature=youtu.be>

Voluntary

Not a regulation

SHOULD

DSS Notified

VDH Maintains

Hazardous Materials

Disseminate

Cost should be a factor

VDH & DEQ Notified

to the Board of Health for final approval. Mr. Bowles emphasized that the Guidelines are voluntary; VDH does not have regulatory authority regarding the cleanup of properties used

and appropriately. Several members stated that the cost of sampling should be considered. Each of these items related to sampling will require further discussion among the work group.

for informational purposes only by the Virginia Department of Health, and, therefore, does not add, eliminate, or change the legal responsibilities of property owners. The intent of the provisions in this document are intended for informational purposes only.

The Virginia Department of Health will disseminate this protocol to its local departments and will advise local departments of the resources available as guidance to affected property owners.

DEQ will disseminate this protocol to its regional offices and will advise the regional offices as to the coordination of responses to inquiries from law enforcement entities related to disposal.

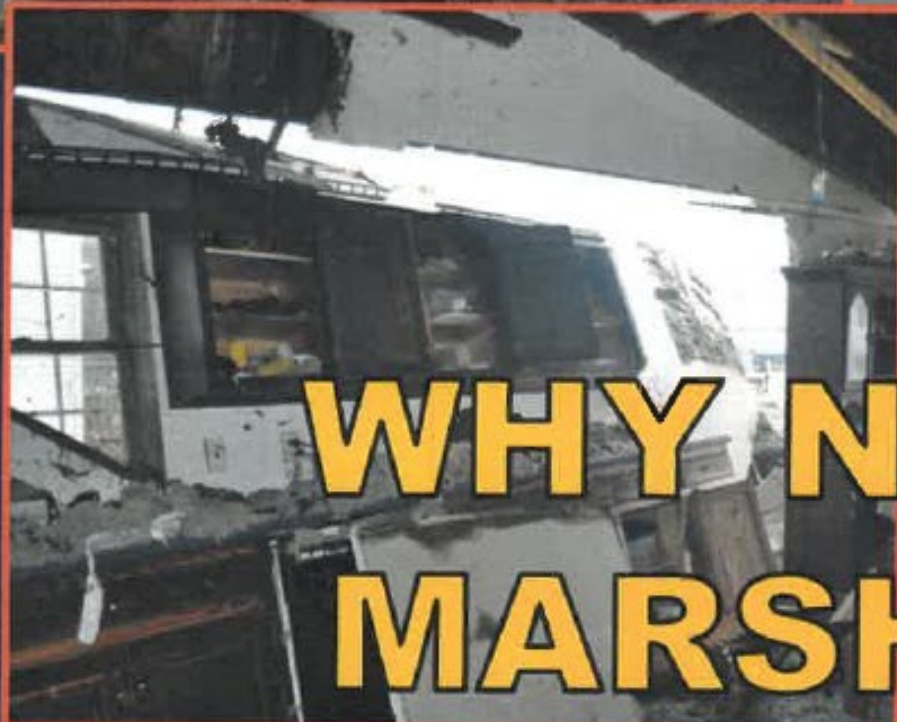
It is recommended that the property not be rented, sold, or occupied until the assessment and cleanup following these Guidelines have been completed. It is further recommended that local building departments be contacted prior to remediation activity to ensure compliance with applicable provisions of the Uniform State Building Code (USBC) and any local ordinances such as health nuisance ordinances. Additionally, §15.2-1716.2 of the Code of Virginia

Law enforcement personnel should follow the Virginia State Police 2005 Best Practices Protocol For Use by Law Enforcement and Emergency Response Agencies Regarding the Clean-up of

The Board of Health and its designees do not conduct inspections of residential properties to document or enforce compliance with these guidelines.

approve methamphetamine cleanup companies, the Virginia Department of Health does maintain a list of contractors that have indicated their ability to perform methamphetamine cleanup in Virginia.

needs are present, have been present recently, or are known to reside at the clandestine laboratory site, the Department of Social Services ("DSS") will be notified immediately. Responding personnel from DSS will provide clean size-appropriate clothing for those exposed to the clandestine laboratory. If



**WHY NOT THE FIRE
MARSHAL OFFICE?**

§ 15.2-2288.6. Agricultural operations; local regulation of certain activities.

A. No locality shall regulate the carrying out of any of the following activities at an agricultural operation, as defined in §3.2-300, unless there is a substantial impact on the health, safety, or general welfare of the public:

1. Agritourism activities as defined in §3.2-6400;
2. The sale of agricultural or silvicultural products, or the sale of agricultural-related or silvicultural-related items incidental to the agricultural operation;
3. The preparation, processing, or sale of food products in compliance with subdivisions A 3, 4, and 5 of §3.2-5130 or related state laws and regulations; or
4. Other activities or events that are usual and customary at Virginia agricultural operations.

Any local restriction placed on an activity listed in this subsection shall be reasonable and shall take into account the economic impact of the restriction on the agricultural operation and the agricultural nature of the activity.

B. No locality shall require a special exception, administrative permit not required by state law, or special use permit for any activity listed in subsection A on property that is zoned as an agricultural district or classification unless there is a substantial impact on the health, safety, or general welfare of the public.

C. Except regarding the sound generated by outdoor amplified music, no local ordinance regulating the sound generated by any activity listed in subsection A shall be more restrictive than the general noise ordinance of the locality. In permitting outdoor amplified music at an agricultural operation, the locality shall consider the effect on adjoining property owners and nearby residents.



101.2 Scope. The SFPC prescribes regulations affecting or relating to maintenance of structures, processes and premises and safeguards to be complied with for the protection of life and property from the hazards of fire or explosion; and for the handling, storage and use of *fireworks*, explosives or blasting agents; and provides for the administration and enforcement of such regulations. The SFPC also establishes regulations for obtaining permits for the manufacturing, storage, handling, use, or sales of explosives. Inspections under the SFPC are a governmental responsibility.

101.3 Purpose. The purpose of the SFPC is to provide for statewide standards to safeguard life and property from the hazards of fire or explosion arising from the improper maintenance of life safety and fire prevention and protection materials, devices, systems and structures; and the unsafe storage, handling, and use of substances, materials and devices, including explosives and blasting agents, wherever located.

101.4 Validity. To the extent that any provisions of the SFPC or the referenced codes or standards are not within the scope of this chapter, those provisions are considered to be invalid. When any provision of the SFPC is found to be in conflict with the *USBC*, Occupational Safety and Health Administration (OSHA), or statute, that provision of the SFPC shall become invalid.

101.5 Local regulations. Any *local governing body* may adopt fire prevention regulations that are more restrictive or more extensive in scope than the SFPC provided such regulations do not affect the manner of construction or materials to be used in the erection, alteration, repair, or use of a building or structure, as provided in the *USBC*, including the voluntary installation of smoke alarms and regulation and inspections thereof in commercial buildings where such smoke alarms are not required under the provisions of the SFPC.

109.1 Inspection. The fire official may inspect all structures and premises for the purposes of ascertaining and causing to be corrected any conditions liable to cause fire, contribute to the spread of fire, interfere with firefighting operations, endanger life, or any violations of the provisions or intent of the SFPC.

Exception: Single-family dwellings and dwelling units in two-family and multiple-family dwellings and farm structures shall be exempt from routine inspections. This exemption shall not preclude the fire official from conducting routine inspections in Group R-3 or *Group R-5* occupancies operating as a commercial bed and breakfast as outlined in Section 310.3 of the *USBC* or inspecting under § 27-98.2 of the Code of Virginia for hazardous conditions relating to explosives, flammable and combustible conditions, and hazardous materials.

RESIDENCES

110.4 Unsafe structures. All structures that are or shall hereafter become unsafe or deficient in adequate exit facilities or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or by reason of illegal or improper use, occupancy or maintenance or which have sustained structural damage by reason of fire, explosion, or natural disaster shall be deemed unsafe structures. A vacant structure, or portion of a structure, unguarded or open at door or window shall be deemed a fire hazard and unsafe within the meaning of this code. Unsafe structures shall be reported to the building official or building maintenance official who shall take appropriate action under the provisions of the *USBC* to secure abatement. Subsequently, the fire official may request the legal counsel of the *local governing body* to institute the appropriate proceedings for an injunction against the continued use and occupancy of the structure until such time as conditions have been remedied.

UNSAFE EVACUATE

110.5 Evacuation. When, in the fire official's opinion, there is actual and potential danger to the occupants or those in the proximity of any structure or premises because of unsafe structural conditions, or inadequacy of any means of egress, the presence of explosives, explosive fumes or vapors, or the presence of toxic fumes, gases or materials, the fire official may order the immediate evacuation of the structure or premises. All notified occupants shall immediately leave the structure or premises and no person shall enter until authorized by the fire official.

**Dry Lithium – Corrosive,
Flammable, Water Reactive**

**Hydrochloric Acid Gas –
Corrosive Compound**

**Iodine –
Irritant
Vapor**

**Coleman Fuel,
Naptha, Lighter
Fluid, etc -
Flammable**

HAZARDOUS MATERIALS. Those chemicals or substances which are *physical hazards* or *health hazards* as defined and classified in this chapter, whether the materials are in usable or waste condition.

Hydrogen Sulfide – Toxic Gas

Polar Solvents – Fire Hazard

**Red Phosphorus –
Flammable Solid**

**Strong Bases –
Corrosive Compound**

Phosphine Gas – Toxic Gas

Ammonia – Corrosive Compound

5003.3 Release of hazardous materials. Hazardous materials in any quantity shall not be released into a sewer, storm drain, ditch, drainage canal, creek, stream, river, lake or tidal waterway or on the ground, sidewalk, street, highway or into the atmosphere.

Exceptions:

1. The release or emission of hazardous materials is allowed where in compliance with federal, state or local governmental agencies, regulations or permits.
2. The release of pesticides is allowed where used in accordance with registered label directions.
3. The release of fertilizer and soil amendments is allowed where used in accordance with manufacturer's specifications.

5003.3.1 Unauthorized discharges. Where hazardous materials are released in quantities reportable under state, federal or local regulations, the *fire code official* shall be notified and the following procedures required in accordance with Sections 5003.3.1.1 through 5003.3.1.4.

5003.3.1.1 Records. Records of the unauthorized discharge of hazardous materials by the permittee shall be maintained.

5003.3.1.2 Preparation. Provisions shall be made for controlling and mitigating unauthorized discharges.

5003.3.1.3 Control. Where an unauthorized discharge caused by primary container failure is discovered, the involved primary container shall be repaired or removed from service.

5003.3.1.4 Responsibility for cleanup. The person, firm, or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. The *fire code official* may require records and receipts to verify cleanup and proper disposal of unauthorized discharges. When deemed necessary by the *fire code official*, cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be the responsibility of the owner, operator, or other person responsible for the unauthorized discharge.

Note: Owners and operators of certain underground and aboveground petroleum storage tanks may have access to the Virginia Petroleum Storage Tank Fund for reimbursement of some cleanup costs associated with petroleum discharges from these tanks. See Article 10 (§ 62.1-44.34:10 et seq.) of Title 62.1 of the Code of Virginia.

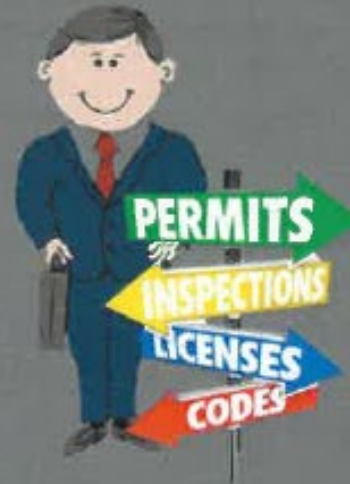


**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

Steps taken during a Meth Lab



Transaction Summary Report - County Details

Search range:

01/01/2020

-

02/28/2020

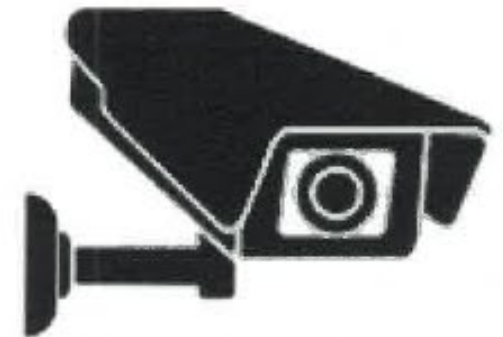
County Summary

State	County/Parish	Submitting Stores	Total Activity	Total Boxes Sold	Total Boxes Blocked	Total Grams Sold	Total Grams Blocked
VA	Shenandoah	7	818	838	24	1,590.12	57.84

Submitting Stores Summary

Submitting Stores	Total Activity	Total Boxes Sold	Total Boxes Blocked	Total Grams Sold	Total Grams Blocked		
CV507518 - 1025 S Main St	162	159	6	304.32	16.8		
Wal-Mart Pharmacy #2647 - 481 W Reservoir Rd	303	327	7	654.99	17.28		
Mt Jackson Drug Store - 5350 Main St	19	23	0	33.18	0	1.44	0
Strasburg Pharmacy - 36820 Old Valley Pike	34	34	0	60.6	0	1.78	0
Rite Aid #01896 - 120 W Reservoir Rd	14	14	0	18.56	0	1.18	0
WALGREENS #17308 - 335 Crystal Ln	199	197	5	383.87	6.4	1.85	1.68
WALGREENS #18079 - 120 W Reservoir Rd	87	84	6	156.8	18.36	1.86	2.56

WARNING



video
surveillance



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office





Shenandoah County Department of Fire and Rescue
Standard Operating Guidelines

Section #/Title: Section 5 Meth & Chemical Lab Cleanups

Article #/Title: Cleanup of Meth and Chemical Labs

Effective Date: September 6, 2013

Applies To: ☐ Volunteer ☐ Career ☒ Both

Purpose: This standard establishes procedures for determining a structure and/or property to be unsafe and for the process of cleaning up meth and chemical labs.

I. Scope

To establish a guideline and procedure for determining a structure and/or property to be unsafe and for the process of cleaning up meth and chemical processing labs.

II. Unsafe Structure

A structure may be deemed unsafe in accordance with the Virginia Statewide Fire Prevention Code Section 110-4 once evidence of a criminal charge will be obtained by a law enforcement officer for the manufacturing of methamphetamines and/or other chemical compound on said property or in a structure.

III. Placarding the Structure

The structure may be placarded in accordance with the Virginia Statewide Fire Prevention Code Section 311.5. Along with the requirements of Section 311.5 the sign shall state:

UNSAFE – DO NOT ENTER
Violation of this requirement may face criminal charges

A clandestine laboratory for the manufacture of illegal drugs and/or hazardous chemicals was seized at this location. Known hazardous chemicals have been disposed of pursuant to law.

IV. Contacting the Owner

The owner will be contacted via a certified letter advising that a meth lab was found on said property and/or structure and giving a time frame to contact the Fire Marshal Office for follow up of corrective actions.

V. Owners Requirements

The owner will be required to do the following;

- Ensure that the property and/or structure involved remain unoccupied until approval is given to reoccupy the affected area.
- Contact a Meth Lab Cleanup Company to perform the needed remediation.
- File paperwork to the Fire Marshal Office to reoccupy the property and/or structure. The paper work shall include, but not limited to, the remediation done by the Cleanup Company.

VI. Fire Marshal Requirements

- The fire marshal shall be required to do the following:
- Once notified of a meth or chemical lab, the Fire Marshal shall coordinate with law enforcement and a criminal charge is going to be obtained by the Fire Marshal. The Fire Marshal shall order the property and/or building be evacuated and the property shall be secured in accordance with the Virginia Statewide Fire Prevention Code Section 110.4 and 110.5.
 - Placard the property and/or structure.
 - Notify the owner via certified letter.
 - Notify the Building Inspection Department of the unsafe property and/or structure.

VII. Reoccupying the Property and/or Structure

The property and/or structure affected shall be reviewed by the following agencies: the Building Inspection Department, and the Fire Marshal Office.

The agencies can deny, request further remediation, or allow reoccupying the property and/or structure.





**Smoke Detector's
Saves Lives.**

**KEEP
OUT**



Shenandoah County Fire Marshal's Office

UNSAFE DO NOT ENTER

Violators of this requirement may face criminal charges

A clandestine laboratory for the manufacture of illegal drugs and/or hazardous chemicals was seized at this location. Known hazardous chemicals have been disposed of pursuant to law.



■ R/O ■ F/E

■ S/M ■ H/F

Order of the Shenandoah County Fire Marshal's Office

**Shenandoah County
Department of Fire and Rescue**

600 North Main Street, Suite 109
Woodstock, Virginia 22664
(540) 459-6177

EVACUATION ORDER

Inspection Date:

Inspector:

Location:		Address:	
		City:	
Phone:		State:	Postal Code:
Contact:		Work:	
Inspection Type:		Inspection Inspection	

The Shenandoah County Fire Marshal's Office was contacted by Law Enforcement Investigators of evidence found inside the structure of a methamphetamine laboratory.

As a result of the findings the structure is deemed UNSAFE and shall be EVACUATED in accordance with the Statewide Fire Prevention Code. Further testing will need to be done to verify the structure is safe to reoccupy. All violations will be turned over to the Building Inspection Department for further follow-up. You can contact the Building Inspection Department at 540-459-6185 for further information on the process. At no time shall the building be reoccupied without the Building Inspection Departments permission.

Failure to comply with this notice may result in a class one misdemeanor for each violation.

You may appeal a decision of the fire inspector within 14 calendar days of receipt of this notice. An appeal application can be obtained at the Shenandoah County Fire and Rescue Office.

The following are violation as a result of the findings;

5003.3 Release of Hazardous Materials

Hazardous materials in any quantity shall not be release into a sewer, storm drain, ditch, drainage canal, creek, stream, river, lake or tidal waterway or on the ground, sidewalk, street, highway or into the atmosphere.

Exceptions:

1. The release or emission of hazardous materials is allowed when in compliance with federal, state or local governmental agencies, regulations or permits.
2. The release of pesticides is allowed when used in accordance with registered label directions.

3. The release of fertilizer and soil amendments is allowed when used in accordance with manufacturer's specifications.

110.4 Unsafe Structures

All structures that are or shall hereafter become unsafe or which constitute a fire hazard, or are otherwise a danger to the public welfare, or by reason of illegal or improper use, or by reason of sustained structural damage by reason of fire, or by reason of being deemed unsafe structures. A vacant structure shall be deemed unsafe if any door or window shall be deemed unsafe. Unsafe structures shall be reported to the fire official who shall take appropriate action. Subsequently, the fire official may institute the appropriate procedure for the occupancy of the structure until it is safe.

110.5 Evacuation

When, in the fire official's opinion, the structure is unsafe or those in the proximity of any structure are in danger of fire, or inadequacy of any means of egress, or the presence of toxic vapors, or the presence of toxic fumes, gas, or smoke, the fire official may order the immediate evacuation of the structure or premises. Occupants shall immediately leave the structure or premises and shall not return until authorized by the fire official.

110.6 Unlawful Continuance

Any person who refuses to leave, interferes with the evacuation of other occupants or continues any operation after having been given an evacuation order shall be in violation of this code.

Exceptions:

Any person performing work directed by the fire official to be performed to remove an alleged violation or unsafe condition.

Other Deficiencies Noted

Violation Code	Corrected Date	Days to Correct	Violation/Notes	Location
----------------	----------------	-----------------	-----------------	----------

Comments/Notes

Representative:

Fire Inspector:

FINAL REPORT METHAMPHETAMINE DECONTAMINATION

3212 North 17th Street
Coeur d' alene, ID 83814



Legal Description:
parcel# C4005000028F

Prepared For:
Jerry Smith
620 W. Tax Loop
Coeur d' Alene, ID 83814

MLCC Project #1019-3897-ID

Report Date: November 18, 2019

A. SCOPE OF WORK

Meth Lab Cleanup Company (MLCC) conducted a decontamination and post remedial assessment of the residential property located at 3212 N 17th, Coeur d'Alene, ID (see map). Jerry Smith. Services were provided at the request of the client because the property tested positive for methamphetamine residue upon completion of a preliminary screening. The MLCC representative for this project was K. Mazzuca, Operations Manager. The decontamination was performed by certified clandestine drug technicians on November 8-11, 2019.

B. BACKGROUND / DECONTAMINATION PROCESS

This property consists of a two-sided duplex; each four units. The property is located in Coeur d'Alene, Kootenai County. There are residential properties on all sides of the property. The total interior square footage of the apartment is approximately 1,200 sq ft. Services to the residence are provided by metropolitan municipalities. The property is located on the property.

The decontamination proceeded as follows. All personnel wore personal protective equipment throughout the decontamination and post sampling process. Safety briefings were conducted at the start of each day. The plumbing system was cleaned with a high pressure water to reduce the concentration of residual chemicals. The exhaust fans from the residence were removed. The blinds were taken down and removed. The carpet was wetted with water to prevent introducing airborne contaminants into the air. The carpet was cut into quarters then rolled up and removed. All tack strip was then removed and placed in the carpet padding and disposed of. The kitchen stove and refrigerator were hand cleaned. The residence utilizes radiant heating in the ceiling upstairs and baseboard heaters in the basement. The baseboard heaters were sprayed with detergent mixture then pressure washed. The circuit breaker was turned off and left off for 24hrs to allow any moisture that was present to dry before turning it back on.

All rooms were then vacuumed 3-times using a high energy particulate air (HEPA) vacuum. Walls were pre sprayed with an environmentally friendly detergent, scrubbed with 3M microfiber mops and rinsed (three wash/rinse cycles); wet vacuuming the effluents. The ceiling walls and floors were then cleaned using a hard surface tool and an extraction machine (3X). Upon completion of each livable area the technicians then sealed off the area from the remaining contaminated areas with critical barriers using 6-mil plastic. All plumbing and fixtures were sprayed and wiped by hand. Effluents from cleaning were disposed of via the sewer system as pH testing indicated neutral readings. Equipment was then decontaminated and loaded into the service vehicle.

All debris was disposed of in a dump trailer and removed to Kootenai County Solid Waste Station. The gloves, cartridge respirators, protective clothing and other personal protective equipment, and cleaning materials used at a site were also disposed of as solid waste.

C. SAMPLING & ANALYTICAL PROCEDURES

Preliminary sampling was completed in accordance with the sampling methodologies summarized in *Idaho Senate Bill No. 1122* and *IDAPA 16 Title 02 Chapter 24, Clandestine Drug Laboratory Cleanup*. This document summarizes remediation and sampling requirements, and defines a standard of 0.10 micrograms per 100 square centimeter area (0.1 µg/100cm²) for hard surfaces. (Therefore, a reported concentration of 0.11 µg/100cm² would be considered to exceed the Idaho standard.)



Sample ID Number	Sample Date	Sample Location	Target	Area Sampled	PreAssessment Results	Post Decon Results
3208-1	10/12/19	Bed 1	Meth	400 cm ²	0.1140 µg/100 cm ²	
3208-2	10/12/19	Bed 2	Meth	400 cm ²	0.0680 µg/100 cm ²	
3208-3	10/12/19	Bed 3	Meth	400 cm ²	0.000 µg/100 cm ²	
3208-4	10/12/19	Bed 4	Meth	400 cm ²	0.1560 µg/100 cm ²	
3208-5	10/12/19	Bath 1	Meth	400 cm ²	0.000 µg/100 cm ²	
3208-6	10/12/19	Bath 2	Meth	400 cm ²	0.000 µg/100 cm ²	
3208-7	10/12/19	Kitchen/Living	Meth	400 cm ²	1.2770 µg/100 cm ²	
3208-8	10/12/19	Garage	Meth	400 cm ²	0.000 µg/100 cm ²	
3208-9	10/12/19	Family	Meth	400 cm ²	0.000 µg/100 cm ²	
3208-10	10/12/19	Field Blank	Meth	400 cm ^{2*}	0.000	
3208-11	11/11/19	Bedroom 1	Meth	400 cm ²		0.000 µg/100 cm ²
3208-12	11/11/19	Bedroom 2	Meth	400 cm ²		0.000 µg/100 cm ²
3208-13	11/11/19	Bedroom 4	Meth	400 cm ²		0.000 µg/100 cm ²
3208-14	11/11/19	Living Room/ Kitchen	Meth	400 cm ²		0.000 µg/100 cm ²
3208-15	11/11/19	Field Blank	Meth	400 cm ^{2*}		0.000

*No surface areas were wiped. The LC/MS data input field requires a numeric value.

The site was evaluated using test procedures appropriate for the site of a clandestine methamphetamine manufacturing laboratory. The survey included an evaluation of the floors, walls, ceilings and other various surfaces within the functional spaces of the unit for methamphetamine surface contamination and visible or identifiable areas of chemical staining or contamination. Substrate testing was performed by surface wipe sampling.

Sampling media was provided by the laboratory with field sample kits prepared by the technician. The methamphetamine surface samples were collected using sterile gauze pads saturated with alcohol in accordance with standard sampling protocols. The wipe samples were collected by the certified decon specialist using clean disposable gloves within new 100 square centimeter area templates that are typically labeled and taped to the surface prior to sampling. The sample area was wiped with the gauze (first from left to right on one side of the gauze, and secondly from top to bottom on the other side of the gauze; repeatedly). Samples were collected from distinct 100 square centimeter (100 cm²) sample areas of the floors, walls and ceilings of the residence (see floor plans pages 5-6). For any given functional space identified by the technician, at least 400 cm² of surface was sampled. The sampling media was then placed in a lab supplied plastic sampling vial, sealed, labeled individually, and stored until shipment to the certified laboratory for analysis.

The methamphetamine surface samples and the field blank were delivered with proper chain-of-custody for analysis to the laboratory. Sample handling, labeling, preservation, documentation, and chain of custody were conducted in a manner consistent with the requirements of the analytical methods being used and based on laboratory recommendations. Samples were analyzed by the laboratory via modified NIOSH 9111 method in accordance with

standard laboratory procedures for methamphetamine wipe sample analysis. Quality Control/Quality Assurance (QA/QC) procedures in handling and laboratory QA/QC were conducted. Four (4) composite (multiple sample area) samples were collected. Results for these samples are reported in average methamphetamine per 100 square centimeters (total methamphetamine detected in micrograms divided by 100 square centimeters). Sample 3208-15 is a Field Blank prepared onsite and submitted to the lab quality assurance purposes.

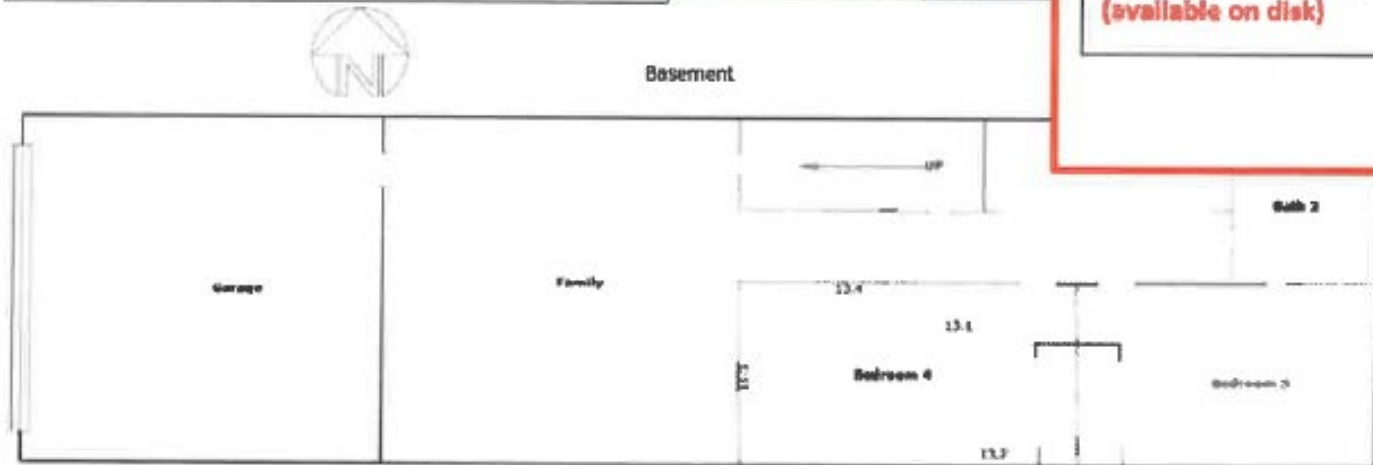
D. RESULTS AND DISCUSSION

Post Decontamination sampling conducted using systematic composite sampling methods indicated all surfaces sampled in the identified functional spaces are below the remediation standard of 0.1 µg/100 cm². Remediation of the residence was conducted per the requirements acknowledged in *Idaho Senate Bill No. 1122* and *IDAPA 16 Title 02 Chapter 24, Clandestine Drug Laboratory Cleanup* as applicable. Therefore, the site is considered "fit for use" (see certificate page 14). Photographs are attached to this document to serve as further documentation of the sample locations (pages 7-13). Attachment 1 contains the lab report and chain of custody form associated with this assessment.

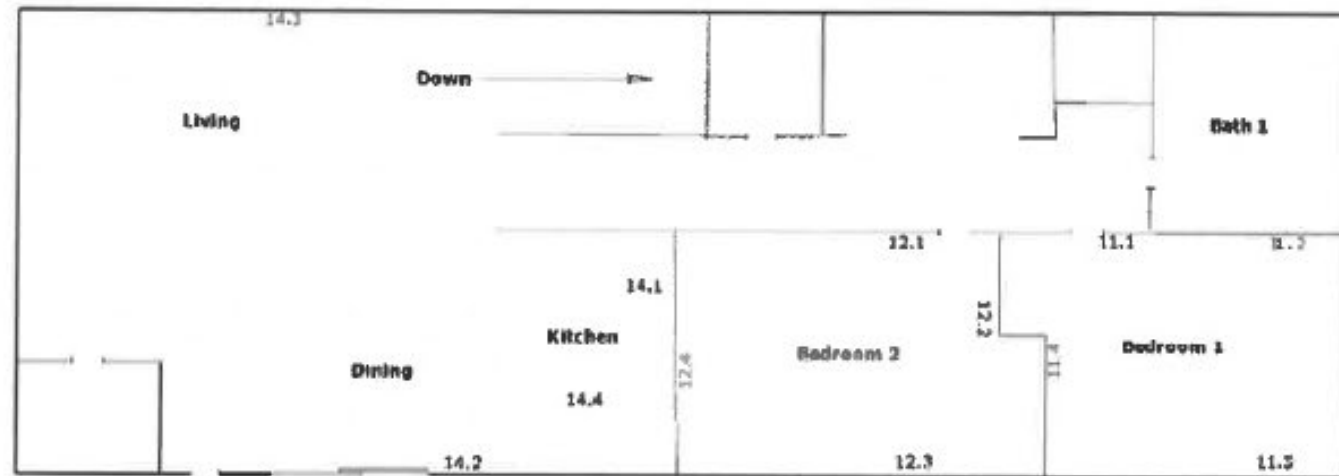
E. Site Maps



F. Floor Plans w/Sample Sites



Upstairs



G. Sample Site & Property Condition Photos
(available on disk)

2994 E. Sable Court
Athol, ID 83801-9794Phone: 208-683-1974
Toll Free: 800-959-6384Email: joe@methlabcleanup.com
Fax: 866-648-7572methlabcleanup.com methlabtestkit.com
methlabcleanup.company

CERTIFICATE OF FITNESS

I further certify that the decontamination of **3212 N 17th, Coeur d'Alene, ID** has been performed in compliance with the performance standards recognized in *Idaho Senate Bill No. 1122* and *IDAPA 16 Title 02 Chapter 24, Clandestine Drug Laboratory Cleanup* as applicable.

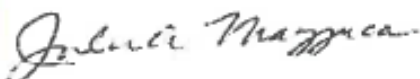
The property has been decontaminated in accordance with the best standards and practices of the industry and is **Fit For Use**. I certify that the cleanup standard established by the Idaho Department of Health and Welfare has been met as evidenced by testing I conducted. Attachment 2 - Qualified industrial hygienist statement of qualifications, including professional certification or documentation.

By:

November 18, 2019



Joseph K. Mazzuca, Operations
Meth Lab Cleanup Company



Julie A. Mazzuca, Registered Professional Industrial Hygienist
Meth Lab Cleanup Company



CONFIDENTIALITY NOTICE:

This document, together with any attachments hereto or links contained herein, is intended for the use of the intended recipient(s) only and may contain information that is confidential or legally protected. If you are not the intended recipient, you are hereby notified that any review, disclosure, copying, plagiarism, dissemination, distribution or use of this communication is **STRICTLY PROHIBITED**. If you are the intended recipient, you are hereby notified that disclosing this information without the expressed written authorization of Meth Lab Cleanup Company is **STRICTLY PROHIBITED**. If you have received this communication in error, please notify the sender immediately by returning this document and delete all copies of the original, along with any attachments hereto or links herein, from your files.

Organization: Meth Lab Clean Up LLC
Address: 2994 E Sable Court,
Athol, ID 83801
Project: Ying X Yang
Project Address: [REDACTED]
Lab Project ID: 1018795
Date Collected: 11 Nov 2019
Date Received: 13 Nov 2019
Collector: R. Dalley
Certifying Scientist: Kim McKown
Approval Date: 17 Nov 2019
Test: 9111- Methamphetamine LC/MS

P.O.Box 2990

Wilsonville, Oregon 97070

Phone: 800-418-3450

Text: 503-855-8330

Sample Location	Sampled	Result	Area(cmA2)	Lab Result(IJg)	Composite Total(IJg)
3208-11	Bedroom 1	ND	400	0.0000 100 cm ²	0.0000
3208-12	Bedroom 2	ND	400	0.0000 100 cm ²	0.0000
3208-13	Bedroom 4	ND	400	0.0000 100 cm ²	0.0000
3208-14	Living Room/Kitchen	ND	400	0.0000 100 cm ²	0.0000
3208-15	Field Blank	ND	400	0.0000 100 cm ²	0.0000

Quality Control	Control Value	Lab Value	%Recovery
Lab Blank	ND	ND	
Check	20	20	100
Surrogate	250	263	105

Check Quality Control - Methamphetamine. Surrogate Quality Control - Methamphetamine.

ND = None Detected = < 0.02 Jg

All other Quality Control results in ng

TECA Analytics is using a modified NIOSH (National Institute of Occupational Safety and Health) method 9111 from the NIOSH Manual of Analytical Methods (NMAM) Fifth Edition.

/s/ fjttL

Certifying Scientist

Kim McKown



**Smoke Detector's
Saves Lives.**



Shenandoah County Fire Marshal's Office

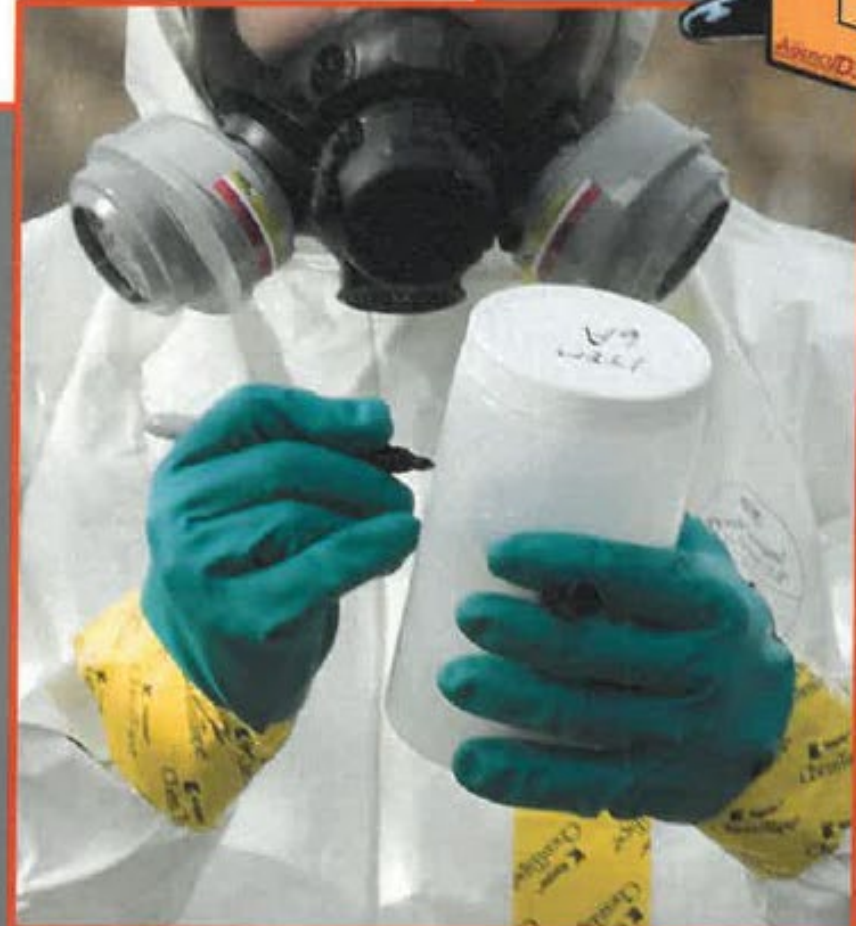


Restitution

§ 15.2-1716.2. Methamphetamine lab cleanup costs; localities may charge for reimbursement.

Any locality may provide by ordinance that any person who is convicted of an offense for manufacture of methamphetamine pursuant to § 18.2-248 or 18.2-248.03 shall be liable at the time of sentencing or in a separate civil action to the locality or to any other law-enforcement entity for the expense in cleaning up any methamphetamine lab related to the conviction. The amount charged shall not exceed the actual expenses associated with cleanup, removal, or repair of the affected property or the replacement cost of personal protective equipment used.

2012, cc. 517, 616.





§ 55.1-708. (Effective October 1, 2019) Required disclosures; property previously used to manufacture methamphetamine.

Notwithstanding the exemptions in § 55.1-702, if the owner of a residential dwelling unit has actual knowledge that such residential property was previously used to manufacture methamphetamine and has not been cleaned up in accordance with the guidelines established pursuant to § 32.1-11.7 and the applicable licensing provisions of Chapter 11 (§ 54.1-1100 et seq.) of Title 54.1, the owner shall provide to a prospective purchaser a written disclosure that so states. Such disclosure shall be provided to the purchaser on a form provided by the Real Estate Board on its website and otherwise in accordance with this chapter.

2013, c. 557, § 55-519.4; 2016, c. 527; 2017, c. 386; 2019, c. 712.



Accidental Car Fire





CASE STUDY

162 North Place
Lane, Strasburg



SanAir Technologies Laboratory

Analysis Report

prepared for

**Envirotex Environmental
Services, LLC**

Report Date: 9/21/2015
Project Name: 162 N. Place Lane,
Strasburg, VA 22657
Project #: 162 N. Place Lane
SanAir ID#: 15029033



NVLAP LAB CODE 90070-D



Certification # 603961



Laboratory # LAB0104



Findings:

1. Sample Number 091615.01 – Daughter's Bedroom HVAC Return – Tested **POSITIVE** for Meth Dust in the amount of 1.7 Micrograms.
2. Sample Number 091615.02 – Daughter's Bedroom Bookshelf – Tested **POSITIVE** for Meth Dust in the amount of 6.3 Micrograms.
3. Sample Number 091615.03 – Daughter's Bedroom Night Stand – Tested **POSITIVE** for Meth Dust in the amount of 2.4 Micrograms.
4. Sample Number 091615.04 – Hallway HVAC Return Filter – Tested **POSITIVE** for Meth Dust in the amount of 3.1 Micrograms.
5. Sample Number 091615.05 – Bathroom Vent Exhaust Fan – Tested **POSITIVE** for Meth Dust in the amount of 2.4 Micrograms.
6. Sample Number 091615.06 – Master Bedroom Fan Blades – Tested **POSITIVE** for Meth Dust in the amount of 63.3 Micrograms.
7. Sample Number 091615.07 – Laundry Closet Shelf - Tested **POSITIVE** for Meth Dust in the amount of 9.3 Micrograms.
8. Sample Number 091615.08 – Living Room Ceiling Light Fixture - Tested **POSITIVE** for Meth Dust in the amount of 4.6 Micrograms.
9. Sample Number 091615.09 – Top of Kitchen Cabinet - Tested **POSITIVE** for Meth Dust in the amount of 14.7 Micrograms.
10. Sample Number 091615.10 – Carpet Steam Cleaner Machine (Inside) - Tested **NEGATIVE** for Meth Dust in the amount of 0.6 Micrograms.

Child Endangerment

METH LAB CLEANUP COMPANY

[Home](#)[About Us](#)[Our Services](#)[Online Training](#)[Regulations](#)[Meth Test Kits](#)[Contact](#)

We Offer On-site/Immediate and Laboratory Analyzed Meth Testing Products

Onsite/Immediate Meth Test Kits

Need to know if meth residue is present?

Quickly and reliably measure meth residue on surfaces. Detect meth residue levels immediately; as low as 0.1 $\mu\text{g}/100\text{cm}^2$ with **AccuMeth®**, Meth Lab Cleanup's immunoassay semi-quantitative home meth test kits. The kits are extremely sensitive and will detect meth at levels recognized by a majority of state's legal standards. Both AccuMeth® and AccuMeth®4 have been independently validated by laboratory and field testing. Watch our videos: **AccuMeth®** and **AccuMeth®4** Meth Test Kits.

Laboratory Analyzed Meth Test Kit

Meth Lab Cleanup Company also offers **MethAssure®**, an easy-to-use meth test kit in which the samples are analyzed by an independent certified laboratory. Know exactly how much methamphetamine residue is present, within days of taking the sample. Results come to your email within 2-3 days of arriving at the laboratory. Analyzed by an accredited laboratory; the best lab in the nation. Watch our video: **MethAssure®** Laboratory Analyzed Meth Test Kit.

Onsite Digital Meth Residue Reader

Black Box Reader® is an electronic monitoring device developed for Meth Lab Cleanup Company for the measurement of methamphetamine residue using lateral-flow assay and digital line intensity reading. Black Box Reader® works with all AccuMeth®, Meth Lab Cleanup's meth testing cassettes to provide the numerical amount of meth in a sample; onsite, immediately. Watch our video: **Black Box Reader®** Digital Meth Test Device.



Leah Mosely

January 2020 Purchases: 3

January 2020 Blocks: 0

February 2020 Purchases: 2

February 2020 Blocks: 4

Jeffrey Wetzel

January 2020 Purchases: 3

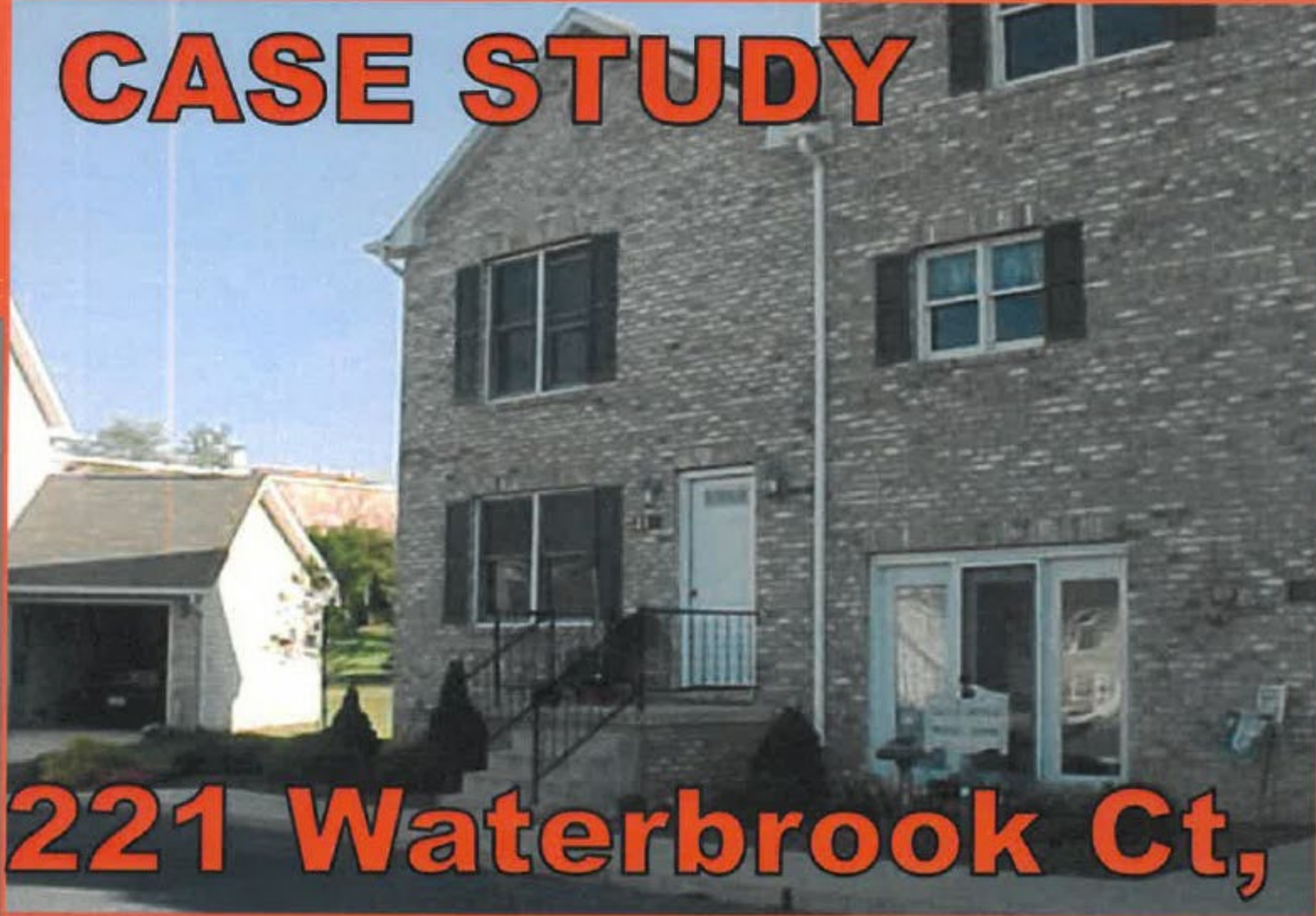
January 2020 Blocks: 3

February 2020 Purchases: 4

February 2020 Blocks: 2

Owner & Suspect

CASE STUDY



**221 Waterbrook Ct,
Woodstock**

SOG Review



**Smoke Detector's
Saves Lives.**



**Shenandoah County
Fire Marshal's Office**

CASE STUDY FIRES

**Eagles Club
One Pot**

**Smith Creek
One Pot**

**Readus Rd
Shed Fire**

Fadeley Case

ORDINANCE

Chemically Contaminated Properties

Adopted by the _____

_____, 2011

Under Authority of Section _____

TABLE OF CONTENTS

FINDING

1.0 DEFINITIONS.....	2
2.0 PURPOSE	6
3.0 POWERS AND DUTIES.....	6
4.0 SCOPE.....	7
5.0 RESPONSIBILITIES OF THE DEPARTMENT.....	7
6.0 RESPONSIBILITIES OF THE PROPERTY OWNER.....	9
7.0 RESPONSIBILITIES OF THE CONTRACTOR.....	10
8.0 PRELIMINARY ASSESSMENTS.....	10
9.0 FITNESS FOR USE.....	10
10.0 PRE-DECONTAMINATION SITE ASSESSMENT.....	11
11.0 WORK PLAN.....	12
12.0 PERMIT TO DECONTAMINATE.....	14
13.0 DECONTAMINATION.....	15
14.0 POST-DECONTAMINATION SITE ASSESSMENT.....	16
15.0 FINAL REPORT.....	16
16.0 LISTED CONTRACTORS.....	16
17.0 DEPARTMENT & COUNCIL OPTIONS.....	17
18.0 EXEMPTIONS.....	17
19.0 ENFORCEMENT.....	17
20.0 NOTICE.....	18
21.0 RIGHT TO APPEAL.....	18
22.0 PENALTY.....	19
23.0 SEVERABILITY.....	19
24.0 EFFECTIVE DATE.....	20

Finding – The _____ finds that hazardous or dangerous chemicals including those used in unsafe or illegal ways in the manufacture and use of illegal drugs are contaminating some properties. The contamination of properties used for

Standard Operating Procedures & Best Management Practices for Decontamination & Sampling of Chemically Contaminated Properties

_____, 2018

Developed as Authorized by

Regulation 0001, Chemically Contaminated Properties

STANDARD OPERATING PROCEDURES TABLE OF CONTENTS

1.0 INTRODUCTION	2
2.0 PURPOSE	2
3.0 BACKGROUND	2
4.0 METHODS OF MANUFACTURE	3
5.0 AMALGAM METHOD	3
6.0 EPHEDRINE METHOD	3
7.0 PRECURSOR MANUFACTURE	3
8.0 BYPRODUCTS AND CONTAMINANTS	3
9.0 IMPLICATIONS FOR HUMAN HEALTH	3
10.0 EXPOSURE RISK	4
11.0 ACTIVE LAB	4
12.0 FORMER LAB	5
13.0 DECONTAMINATION	5
14.0 PRELIMINARY ASSESSMENT	5
15.0 WORK PLAN	6
16.0 PRE-DECONTAMINATION SITE ASSESSMENT	7
17.0 THE WRITTEN WORK PLAN	7
18.0 ASSESSING AND PROPER DISPOSAL OF BULK CHEMICALS	9
19.0 RESIDUAL DECONTAMINATION	9
20.0 POST-DECONTAMINATION SITE ASSESSMENT	10
21.0 FINAL REPORT	12
22.0 EVALUATION OF PROPERTY FOR USE	13
23.0 LISTED CONTRACTORS	13
Appendix A – Sampling Requirements	14
Appendix B – Method of Manufacture – Toxicity	15
Appendix C – management Practices	26
Appendix D – Laboratory & Analysis	35

DO YOU HAVE A PROBLEM?

Transaction Summary Report - County Details

Search range:

01/01/2020

-

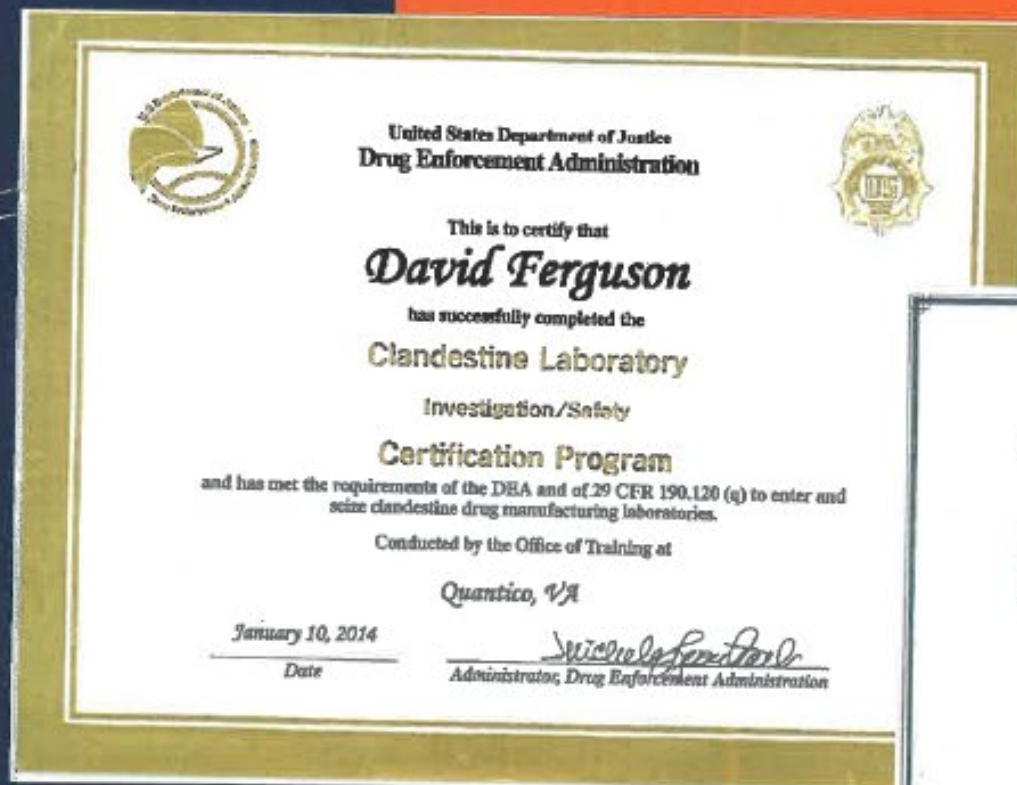
02/28/2020

One Month

County Summary

State	County/Parish	Submitting Stores	Total Activity	Total Boxes Sold	Total Boxes Blocked	Total Grams Sold	Total Grams Blocked	Avg. Box Size Sold (grams)
VA	Loudoun	56	13,110	13,484	446	29,069.89	1,135.59	2.16

Free Training Available



**One Week
plus
Equipment**



Two Weeks

**How Many
do You
Have?**



**Shenandoah County
Fire Marshal's Office**

**Smoke
Detector's
Saves Lives
How many is
too many?**



**Smoke
Detector's
Saves Lives**