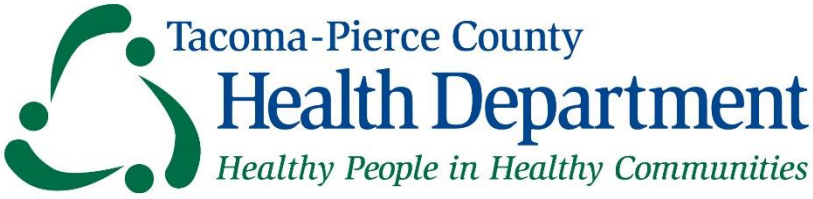

Tacoma – Pierce County Health Department
Methamphetamine
Contaminated Property
Site Remediation Requirements

REQUIREMENTS OF THE TACOMA-PIERCE COUNTY BOARD OF HEALTH GOVERNING REMEDIATION OF CONTAMINATION ASSOCIATED WITH THE MANUFACTURE, USE, STORAGE AND DISPOSAL OF CONTROLLED SUBSTANCES, AND THE HAZARDOUS CHEMICALS ASSOCIATED WITH THE MANUFACTURE, USE, STORAGE AND DISPOSAL OF CONTROLLED SUBSTANCES.

Revised July 2013

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Explanation of Acronyms / Abbreviations / Units

AHERA	Asbestos Hazardous Emergency Response Act
ACM	Asbestos Containing Material
CDL	Clandestine Drug Lab
cm^2	centimeters squared
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ft^2	foot or feet squared
IAQ	Indoor Air Quality
HVAC	Heating Ventilation Air Conditioning
IBC	International Building Code
JVA	Junk Vehicle Affidavit
kg	kilogram
L	Liter
L&I	Washington State Department of Labor and Industry
LHJ	Local Health Jurisdiction
MDMA	Ecstasy[1]
mg	milligram
mg/kg	milligram per kilogram (same as ppm)
MTCA	Model Toxics Control Act[2]

[1] 3,4 methylenedioxymethamphetamine
[2] MTCA Cleanup Regulation Chapter 173-340 WAC

NADCA	National Air Duct Cleaners Association
P2P	Phenyl-2-Propanone
PCS	Petroleum Contaminated Soil
PID	Photoionization Detector
ppb	parts per billion
PPE	Personal Protective Equipment
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
Red P	Red Phosphorous method of methamphetamine production
µg	microgram
µg/L	microgram per liter (same as ppb)
VOC	Volatile Organic Compound
WAC	Washington Administrative Code
WDF	Waste Disposal Facility
WDOH	Washington State Department of Health

Definitions

"Accredited Analytical Laboratory" means a laboratory accredited by Washington for the analyte of concern.

"Auditor" means the Pierce County Auditor.

"Authorized Contractor" as used in these guidelines, means any person or persons who decontaminates, demolishes, or disposes of contaminated property as required by this chapter**,** who is certified by The Health Department as provided for in RCW 64.44.060, WAC 246-205, registered under RCW 18.27, and who is certified by The Health Department as provided for in Section 8.1, Contaminated Properties Chapter of the Pierce County Environmental Health Code.

"Board of Health" means the Tacoma-Pierce County Board of Health.

"Contaminated" or **"contamination"** as used in these guidelines, means the degradation of any component of the environment by the release of a substance into the environment in sufficient quantity to impair its usefulness as a resource, or pose a public health and/or environmental threat; or property is polluted by hazardous chemicals so that the property is unfit for human habitation or use due to immediate or long-term hazards.

"Contaminated Property" as used in these guidelines, means property contaminated by hazardous chemicals.

"Department of Health" means the Washington State Department of Health.

"Department of Licensing" means the Washington State Department of Licensing.

"Fit for Use" as used in these guidelines, means The Health Department has determined that a property does not pose a significant public health threat and does not pose a significant risk of a threatened release.

"Groundwater" means any water found beneath the surface of the ground.

"Hazardous Chemicals" as used in these guidelines, means the following substances associated with the illegal manufacture of controlled substances: (a) Hazardous substances as defined in RCW 70.105D.020; (b) precursor substances as defined in RCW 69.43.010 which the state board of health, in consultation with the state board of pharmacy, has determined present an immediate or long-term health hazard to

humans; and (c) the controlled substance or substances being manufactured, as defined in RCW 69.50.101.

“Local Health Officer” means the Tacoma-Pierce County Director of Health or his /her authorized representative.

“Person” means any individual, corporation, company, association, society, firm, partnership, joint-stock company, or any public entity.

"Property" as used in these guidelines, means any real or personal property that is involved in or affected by the unauthorized manufacture, use, distribution, or storage of hazardous chemicals. This includes but is not limited to single-family residences, units of multiplexes, condominiums, apartment buildings, land, septic systems, boats, motor vehicles, trailers, manufactured housing, any shop, booth, garden, or storage shed, and all contents of the items referenced in this subsection.

“Property Owner” means a person with a lawful right of possession of the property by reason of obtaining it by purchase, exchange, gift, lease, inheritance, or legal action.

“Refit for Reuse” as used in these guidelines, means that the local health officer has determined the property has been remediated pursuant to RCW 64.44, WAC 246-205, and this Chapter; the property does not pose a significant public health threat and does not pose a significant risk of a threatened release.

“Release”, as used in these guidelines, means any spilling, leaking, emitting, or discharging of a hazardous material from a storage structure, process, or facility, or other operation or activity, into or onto soil, sediment, soil gas/vapor, air, water, groundwater, or other natural or man-made structures or materials.

“Remediation” as used in these guidelines, means to remove or treat contamination and contaminated media to meet the requirements of WAC 173-340, or this chapter, whichever is more protective of public health and the environment.

“Sample Plan” as used in these guidelines, means a site specific plan for collecting environmental samples at properties for the purpose of assessing hazardous chemical contamination from the illegal manufacture, use, distribution, or storage of a controlled substance, or collecting any samples at a property determined to be Unfit for Use.

“Significant Risk” as used in these guidelines, means that the local health officer has determined that the potential for hazardous chemical exposure is enhanced due to factors that include but are not limited to: hazardous chemicals are stored in unapproved or open containers, property is unsecure and/or vacant, a high potential for

trespass due to property location, property is located in close proximity to sensitive environments, groundwater, or the property is located adjacent or near public places such as parks or schools.

"The Health Department" means the Tacoma-Pierce County Health Department or staff representative.

"Threatened Release" as used in these guidelines, means a hazardous chemical is stored in a manner that is likely to cause a release. Open containers, containers not approved to hold hazardous chemicals or containers not approved to hold the hazardous chemical they currently hold are considered to be causing a threatened release.

"Tenant" as used in these guidelines, means a person who has the temporary use and occupancy of real property owned by another.

"Unfit for Use" as used in these guidelines, means The Health Department has determined that a property does pose a significant public health threat and/or does pose a significant risk of a threatened release.

"Vehicle or Vessel" as used in these guidelines, means property that is registered with the Washington State Department of Licensing.

"Warrant" as used in these guidelines, means a means a court order permitting administrative inspection and collection of samples pursuant to RCW 66.44.020 and RCW 69.50.502 as applicable.

Introduction

This document provides authorized contractors clear and consistent remediation requirements that are approved by the Tacoma-Pierce County Health Department (The Health Department) for remediation at sites contaminated by the manufacture, use, storage, or distribution of controlled substances and associated hazardous chemical precursors, residues and waste.

Once the presence of contamination above Washington State Cleanup Levels or the presence of a significant risk of a threatened release has been established on the property, The Health Department will declare a parcel, or specific portions of a parcel, "Unfit for Use". A health order, signed by local health officer, shall be filed with the auditor, where the order pertains to real property, and such filing of the complaint or order shall have the same force and effect as other lis pendens notices provided by law. For the purposes of these requirements, an unfit for use property is considered contaminated property.

In most cases the goal for the authorized contractor is to remediate a client's parcel in order to obtain a "Refit for Reuse" health order from The Health Department. The Health Department assumes that the parcel is contaminated and requires the property owner to prove that it is not. The authorized contractor provides the expertise in assessing, decontaminating, and documenting that all areas of concern are not, or are no longer contaminated.

Other scenarios may only require the authorized contractor to assess and define hazardous chemical contamination for a particular part of a parcel or property. The typical contaminated property is a dynamic site, each with a unique set of complexities. In order to best address this diversity the authorized contractor must submit a site-specific strategy (the work plan) to define the proposed method for assessment and remediation of each site or project.

Due to the variable nature of these sites, The Health Department may deviate from these remediation requirements when warranted by specific circumstances. Any changes in requirements by The Health Department will be clearly communicated to the authorized contractor.

These requirements address procedures for remediation acceptable to The Health Department. This document will not reiterate acceptable sampling techniques or methods. It is assumed that authorized contractors are already proficient in and knowledgeable about these methods.

The authorized contractor is ultimately responsible to ensure that all applicable federal, state, and local codes, regulations, and guidelines are followed while performing contaminated property remediation projects within Pierce County. The authorized contractor is also responsible for knowing and understanding other agencies' regulations. If an authorized contractor discovers a conflict between what is required by The Health Department and another agency, it is the responsibility of the authorized contractor to immediately notify The Health Department to discuss and seek a resolution to the conflict.

Waste Disposal and Notification

The following guidelines apply to all waste collected or generated at contaminated property remediation projects, including but not limited to: Solid waste, household hazardous waste, dangerous waste, wastewater, lead waste, contaminated soil, Freon-containing appliances, liquid, and asbestos waste.

The authorized contractor will be required to notify waste-haulers and/or Waste Disposal Facility (WDF) supervisors that the waste has been collected from a contaminated property and may be contaminated with hazardous chemicals.

The Health Department requires the authorized contractor to notify a waste disposal facility that the disposed waste is from a methamphetamine contaminated property. The authorized contractor is required to request that a representative of a waste disposal facility sign a copy of the Methamphetamine Contaminated Property Work Plan Approval Letter issued by the Health Department.

A representative signature from each waste disposal facility utilized for a project must be included. The authorized contractor must include disposal receipt(s) and a copy of the signed Work plan Approval Letter with the project Final Report.

The authorized contractor must submit photocopies of receipts, including the dates of disposal and address(es) from which the waste was collected, to be included in the final report. If a receipt is not available, the authorized contractor must state in the final report the circumstances, including the date of disposal, WDF name, WDF location, WDF contact information and the materials that were disposed of at the waste collection facility. In these cases the authorized contractor may use the *Waste Manifest Form* provided in Appendix A-1. In conjunction with photo-documentation, this receipt must be submitted with the final report.

City of Tacoma Landfill

The City of Tacoma Landfill will only accept Household Hazardous Waste (HHW). All other waste, including appliances, must be disposed at an alternate waste disposal facility (LRI Landfill). When disposing HHW at the City of Tacoma HHW Facility, the authorized contractor must adhere to the following conditions:

- Contact the facility in advance ((253) 591-5418).
- Provide a copy of the signed work plan approval letter with each load.
- Limit disposed HHW material to 30 gallons per day.
- Ensure material is properly organized and contained.

Solid Waste

The hazardous chemicals associated with the manufacture, use, storage, and distribution of hazardous chemicals and the accumulation of solid waste are often encountered together at a contaminated property. In some cases, contaminated properties appear to be more impacted by solid waste than hazardous chemicals. Authorized contractors and homeowners often feel that the removal of the solid waste does not fall into the scope of a contaminated property remediation project. The Health Department's concerns include:

- Hazardous chemicals, items, or equipment mixed in with the solid waste. (HCL generators, anhydrous ammonia generators, reaction waste, sharps, etc.)

- Impacted soil, dug pits, groundwater pathways, etc. that may lie underneath the solid waste.

- Items that may have come from inside a contaminated area and may now be contaminated with hazardous substances. (clothes, toys, sharps, etc.)

For site remediation purposes, most solid waste can be classified into three categories:

1. Loose debris. This includes items such as: household trash, clothing, toys, bedding, chemical containers, paper debris, etc.

2. Individual pieces. This includes items such as: car parts, construction materials, tools, yard maintenance equipment, hot tubs, etc.

3. Debris Piles. This includes mixed waste that has been gathered in specific areas of the property.

Authorized contractors should use the following guidance when assessing solid waste.

1. Loose debris should be carefully handled and disposed of with other general wastes generated at the unfit for use property.

2. Individual pieces of solid waste must either be disposed of with other general waste generated at the contaminated property or, if the authorized contractor is confident that the waste is not impacted with hazardous chemicals, be left on-site for the property owner to handle once a refit for reuse health order has been issued. If the waste is to be left on-site, the authorized contractor must follow these steps:

- Assess each piece for impacts such as corrosion, infectious agents or potential hazardous chemical contamination. If the authorized contractor believes that the item is potentially impacted then it must be disposed or decontaminated and post decontamination confirmation sampled. The Health Department assumes that items that were once inside a contaminated structure are contaminated, and therefore will require the item to be pre-sampled or decontaminated and post decontamination confirmation sampled.

- Items to be left on-site must be staged at another area of the property. All items that are to remain on-site must be staged together and in a manner that will protect them from the environment. For instance, the authorized contractor may place these items in a structure that has been **pre-sampled** and found to be free of contamination above the decontamination standards. If this is not an option, items may be securely covered with tarps. Other options may exist; consult with The Health Department.

    - Items that are typically open to the environment such as woodpiles, hot tubs, swimming pools, etc., may be left in place. If there is uncertainty, The Health Department is available to help determine how specific items need to be stored for the final inspection.

- Once the items have been staged and sheltered, the area from which they were moved must be assessed. If visual observation or other evidence suggests that the surface beneath or around an item has been impacted by hazardous chemicals, then follow the guidance outlined in "Burn-Pits / Impacted Soil / Debris Piles"

3. Remove and dispose of all debris piles. Removal should be carefully done with specific attention to the piles' contents. Once a pile has been removed, the area underneath must be assessed. Follow the guidelines presented in "Burn-Pits / Impacted Soil / Debris Piles".

Buried Material

Occasionally, the authorized contractor will need to investigate the possibility for buried material present at a contaminated property. An investigation for buried material may be required due to the following circumstances:

- Reports from agency staff citing that buried material exists. Example: Law enforcement, Ecology, or The Health Department observed indications of buried material during the initial inspection.

- Buried material might have been uncovered during the site remediation process. Example: While removing a burn-pit, an authorized contractor uncovered buried material.

- Credible reports from neighbors citing specific instances and locations where they observed materials being buried.

- During the authorized contractor's assessment of the property, areas of suspicion might be discovered. Example: While walking the property the contractor encountered an area free of vegetation that is very soft and/or uneven.

Other cases of suspected buried material may arise. Regardless of the reason, if the authorized contractor suspects buried material or is directed to assess an area for buried material, then a strategy must be outlined for The Health Department.

Acceptable methods of assessment include: Probing, excavation of test pits and ground penetrating radar. The authorized contractor must submit a strategy to assess these areas to The Health Department.

If buried material is discovered, the authorized contractor will remove the buried material. Depending on the type of material and the condition of the soil, environmental samples (soil and/or groundwater) may need to be collected.

Consultation with The Health Department will be necessary, as these occurrences will be handled on an individual basis.

Waste Water Disposal

Wastewater generated during the decontamination process must be screened for pH and then neutralized if necessary. Once this has been achieved, the wastewater may be transported to a connection with a municipal sanitary sewer and disposed. Alternately, the wastewater may be stored onsite in secure barrels/drums and pumped for disposal by a septic service company certified by The Health Department.

Additional care will be required during the decontamination of structures with dirt or damaged flooring. The authorized contractor must make every attempt to collect wastewater so that it is not released.

Floor drains may lead to surface water bodies or discharge directly to surface or subsurface soil. Floor drains must be covered/protected so that wastewater can be collected, characterized, and neutralized prior to disposal.

Authorized contractors must describe in the work plan the methods they will employ to ensure that wastewater is collected, characterized, neutralized and properly disposed.

Burn Pits / Impacted Soil / Debris Piles

Sometimes, burn pits and debris piles will contain potentially hazardous chemicals such as chemical containers, reaction waste, stripped batteries, etc. Other times, they will appear benign and be limited to the appearance of ash, wood and general refuse.

Regardless of what is visible, The Health Department assumes that underlying soils have been impacted by hazardous chemicals and will need to be assessed.

Thorough remediation and assessment shall include:

1. Total removal of the burn pit or debris pile down to the native soil.

2. Field screen the soil following the guidelines presented in Appendix A-2 "Field Screening and Headspace Analysis with a Photoionization Detector".

3. If field screen samples indicate elevated VOC levels (>5 ppm above background readings), then collect a soil sample for VOC analysis[3]. If the presence of metals is suspected, then collect a soil sample for RCRA 8 metals analysis[4].

4. If other contaminants are suspected (pesticides, fuel, semi-volatiles, herbicides, etc.) then consult an accredited analytical laboratory or The Health Department for further guidance with regards to collection protocol and appropriate laboratory test methods.

5. If laboratory analytical results indicate the presence of contaminants, refer to MTCA Method A Clean-up Levels for Unrestricted Land Use (Appendix A-4) and contact The Health Department for further guidance. This will typically involve the removal and proper disposal of the contaminated soil followed by further sampling. Even if a contaminant does not have a specific MTCA cleanup level, the MTCA regulation indicates that impacts should be reduced to natural background levels.

[3] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Pub 334-106*. Office of Environmental Health & Safety.

[4] EPA Method 6000/7000 Series (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver)

Distressed Vegetation

Areas of distressed vegetation resulting from hazardous chemical impacts are often difficult to determine. Depending on the season, current weather conditions, and ground cover the authorized contractor and The Health Department may overlook these environmental impacts. It is not easy to differentiate between hazardous chemical impacted areas and natural areas of decay or stress. Obtaining a pH measure of the suspect soil and comparing it with the pH measure of the native soil may help the authorized contractor determine if the soil is impacted naturally or due to chemical dumping. The *Soil Survey of Pierce County*[5] will contain pH values for the various soil types located in Pierce County. At a minimum, authorized contractors should pH field-screen, VOC soil field screen, sheen test, and determine the presence of an odor in areas that are suspicious and then follow the same guidelines for "Burn Pits / Impacted Soil / Debris Piles" for remediation.

Common places where hazardous chemical wastes are dumped include along fence lines, behind outbuildings, along streams, in blackberry bush patches or areas of heavy weed infestation. Hazardous chemical impacts are often indicated by the remnants of rock salt, binder, empty chemical containers, and presence of odor, presence of sheen, or elevated VOC or pH readings. A careful review of any available law enforcement reports and The Health Department's site file may give clues as to the type and quantity of waste being dumped.

[5] Zulauf, A. 1979. Soil Survey of Pierce County Area, Washington. *Washington : National Cooperative Soil Survey.* 128 p.

Surface Water

Surface water bodies are more susceptible to contamination than groundwater because they are "open" at the land's surface. Surface water located on or directly adjacent to an unfit for use property will require evaluation for possible impacts. Proximity to surface water, topography, potential contaminants, soil type, and soil characteristics are factors that should be researched to evaluate risk of impact. Signs of impacts include, but are not limited to:

- Visible sheens on the water
- Unusual staining along the shoreline or sediment
- Distressed or dead aquatic vegetation
- Distressed or dead shoreline vegetation
- Signs of dead wildlife in the general area
- Unusual odor emanating from the water
- Signs of hazardous chemical waste floating on or residing at the bottom of the water body

Because of the complexities of surface water contamination and testing requirements[6] [7] [8], it is highly recommended that after formulating a sampling plan for surface water, the authorized contractor requests a review of this plan from The Health Department as early as possible. Please note that this review process may require additional technical consultation resulting in a longer than a usual work plan approval process.

[6] The United States Environmental Protection Agency. 1982, Handbook for Sampling and Sample Preservation of Water and Waste Water. *EPA publications 600/4-82-029*, Environmental Support and Monitoring Laboratory. 418 p.
[7] The United States Environmental Protection Agency. 1983, Addendum to Handbook for Sampling and Sample Preservation of Water and Waste Water. *EPA publications 600/4-83-039*, Environmental Support and Monitoring Laboratory. 32 p.
[8] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Publication 334-106*. Office of Environmental Health & Safety.

Groundwater & Water Systems

On occasion it may become necessary to collect a groundwater sample through a drilled borehole, directly from an area of exposed ground water or via an existing well. Although rare, situations have occurred in Pierce County where groundwater has been impacted due to disposal of hazardous chemicals at a contaminated property. More frequent however, is the observation of indicators that groundwater could potentially be impacted. The authorized contractor and The Health Department must consider all indicators of potential groundwater contamination and determine the necessity of groundwater sampling.

Obvious indicators of groundwater impaction include, but are not limited to:

- Well casing with obvious corrosion or odor.
- Reliable and specific witness reports of direct contamination of a well.
- Elevated readings from air monitoring equipment at the wellhead.
- Dug pits/wells with the presence of a: "sheen", odor, discolored soil, and/or chemical containers.
- Contaminated soils (including drain-fields) in close proximity to wellheads.
- Signs that the well cap has been disturbed
- VOC or Methamphetamine contamination within a well house.
- Reliable and specific witness reports regarding the dumping or burial of waste in close proximity to wellheads or shallow groundwater.

When any of these indicators are present the authorized contractor should assume that The Health Department will require a groundwater sample. Normally The Health Department will require the collection of a sample for VOC analysis[9]. However, if exotic substances, such as P2P or MDMA, were being manufactured then the sample should also be analyzed for Resource Conservation and Recovery Act (RCRA) 8 Metals[10].

[9] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Publication 334-106*. Office of Environmental Health & Safety.

[10] EPA Method 6000/7000 Series (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver)

Many other "designer" controlled substances exist. As different substances and even different methods of synthesizing currently recognized controlled substances emerge, they may become a public health concern. In order to properly assess and remediate contaminated property, it will be a shared responsibility of The Health Department and the authorized contractor to conduct the literature research required to understand the potential hazards.

If an indicator makes one suspicious that contamination may be present, document the findings and inform The Health Department. Authorized contractors must follow a well water sample collection methodology as outlined in the Washington State Department of Health publication, "*Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites*"[11].

Septic Systems

Onsite septic systems must be assessed with caution. Many times the onsite system serves as a means of disposal for hazardous chemicals. The combination of the various hazardous chemicals in a septic tank can create hazardous and even ignitable conditions. Assessment of onsite systems should be started early in the remediation process since initial analytical results may trigger further action, such as aeration and/or further sampling. All septic systems at a contaminated property remediation project site must be assessed through the collection and analysis of a wastewater sample as outlined in the Washington State Department of Health publication, "*Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites*"[12].

Analytical results from a VOC sample[13] will determine the authorized contractor's responsibility for further testing and disposal. Contaminated property where exotic substances, such as P2P or MDMA, were being manufactured should also be analyzed for Resource Conservation and Recovery Act (RCRA) 8 Metals[14].

Many other "designer" controlled substances exist. As different substances and even different methods of synthesizing currently recognized controlled substances emerge they will become a public health concern. In order to properly assess and remediate contaminated property, it will be a shared responsibility of The Health Department and

[11] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Pub 334-106*. Office of Environmental Health & Safety.
[12] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Pub 334-106*. Office of Environmental Health & Safety.
[13] EPA Method 8260
[14] EPA Method 6000/7000 Series (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver)

the authorized contractor to conduct the research required to understand the potential hazards.

- If analytical results for ALL analytes of concern indicate non-detectable or unquantifiable concentrations, then the septage can be left in place and no further sampling is required.

- If analytical results indicate the presence of an analyte of concern, but concentrations are below MTCA Method A cleanup levels[15], then the septage must be pumped by a septic pumping company certified by The Health Department. Septic waste should then be taken to a wastewater treatment facility. No further sampling is required. Retain the pumping receipt to include in the final report.

- If analytical results for total VOC's indicate contamination above MTCA Method A cleanup levels, but below 1,000 ppm, then a drain-field sample must be collected, and a septic pumping company certified by The Health Department must pump the septage. Septic waste should then be taken to a wastewater treatment facility. Retain the receipt for pumping and disposal to include in the final report. Follow the guidance below for the collection of drain-field samples.

    - If the drain-field sample indicates contamination above MTCA Method A cleanup levels, then further soil sampling will be required to define the vertical and lateral extent of the contamination. Contact The Health Department for guidance.

- If analytical results indicate total VOC contamination above 1,000 ppm then aeration must take place before the material will be safe to pump and dispose. Aeration is a slow process and, depending on concentrations, may take weeks to reduce contaminant levels to acceptable limits. A sample(s) will be required to properly characterize the waste to ensure that it is within acceptable pumping and disposal levels. Follow the guidelines outlined below for the collection of drain-field samples.

    - Under most circumstances the Puget Sound Clean Air Agency (PSCAA) will not require a permit for aeration in the form of a "Notice of Construction" due to the fact that heavily contaminated septic tanks are exempt.[16] Unusual situations may require a "Notice of Construction". Consult with PSCAA to ensure compliance.

[15] Model Toxics Control Act Method A: Unrestricted Land Use Cleanup Levels for Soil
[16] PSCAA - Regulation 1, Section 6.03, Chapter 94

- If analytical results for total VOCs exceed 10,000 ppm, then the septic waste may designate as a Dangerous Waste under Washington Dangerous Waste Regulations. Notify The Health Department for guidance. Follow the guidelines outlined below for the collection of drain-field samples.

Photo-documentation of the authorized contractor's presence at the site during the septic tank pumping shall be provided in the final report. The photograph shall show the authorized contractor, the septic service company and a recognizable area of the property.

The authorized contractor shall notify the septic service company if any contamination is present, regardless of concentration. A list of septic service companies certified by The Health Department is located at the following Internet address:

http://www.tpchd.org/page.php?id=164

Collection of Drain-Field Samples

If analytical results indicate contamination above MTCA Method A cleanup levels[17], The Health Department will require the drain-field to be assessed. Authorized contractors must expose the system's drain-field in order to collect a soil sample from the area directly below the perforated pipe.

The authorized contractor must expose the portion of the perforated pipe that is closest to the septic tank, from the line that is in use. In some cases the septic "system" may not have a drain-field. In this instance, sample from the point directly beneath the outlet of the "tank". In all situations the goal is to sample from the logical point of the most severe impact.

Once the area to be sampled has been properly exposed, follow the soil sample collection methodology as outlined in the Washington State Department of Health publication, "*Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites*"[18].

[17] Model Toxics Control Act Method A: Unrestricted Land Use Cleanup Levels for Soil
[18] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Pub 334-106*. Office of Environmental Health & Safety.

Recreational Vehicle/Vessel Holding Tank Assessment

"Holding tanks on boats and RVs are used to keep all sanitary wastes onboard when a sewer system is unavailable. Since little or no carriage water is used, as is in typical domestic sanitary waste streams, holding tank wastewater is far more concentrated than typical domestic wastewater. Compounding the problem, additives are introduced into these tanks, primarily to control odors. There are a wide variety of such additives used, the most common of which are formaldehyde-based compounds (including the popular Aqua-Kem®). Other types include those based on quaternary ammonium compounds ("quats," which often impart a pine scent) and enzyme formulations. In general, while these additives work well to control odors aboard the boat or RV, they complicate the treatment and disposal of the resulting mixture"[19].

Authorized contractors shall assess the wastewater holding tanks of recreational vehicles/vessels as part of a decontamination or demolition event. Authorized contractors shall adhere to the following guidance for proper assessment:

1. Visually inspect the holding tank to determine if it contains material. If the holding tank is empty no further assessment is required.

2. Use the protocol for "Field Screening and Headspace Analysis with a Photoionization Detector"[20] to screen the tank contents for volatile substances.

3. Field screen the holding tank contents for pH to determine if the contents are corrosive.

4. Inspect the contents to determine if a "sheen" or chemical odor is present.

5. If field screening or inspection indicates the potential for hazardous waste to be present, a sample must be collected and analyzed for volatile organic compounds.[21] Depending on the contents of the tank other analytical methods may be appropriate.

6. If analytical results indicate total VOC contamination above 1,000 ppm, then aeration must take place before the material will be safe to pump and dispose. Aeration is a slow process and, depending on concentrations, may take weeks to reduce contaminant levels to acceptable limits. A sample(s) will have to be

[19] National Science and Technology Center. 2000. Dealing With Holding Tanks at BLM Sites. *National Science and Technolgy Center Resource Notes No.38*. National Science and Technology Center - BLM, 18 p.
[20] Appendix A-2
[21] Follow the guidance for the assessment and sample collection of Septic Systems, beginning on page 12.

taken to properly characterize the waste to ensure that it is within acceptable pumping and disposal levels.

7. If analytical results for total VOCs exceed 10,000 ppm, then the waste may designate as a Dangerous Waste under Washington Dangerous Waste Regulations. Notify The Health Department for guidance.

8. Once determined to be safe for pumping and disposal, the holding tank contents shall be disposed at a RV waste facility in route to the trailer demolition/disposal, or pumped by a septic service company certified by The Health Department and legally disposed.

Photo-documentation of the authorized contractor's presence at the site during the holding tank pumping or disposal shall be provided in the final report. The photograph shall show the authorized contractor, septic service company or RV waste facility, and a recognizable area of the property/vehicle/vessel.

Vehicles

Vehicles encountered at a contaminated property may have been used to use, transport and store hazardous chemicals. The Health Department assumes all vehicles located on contaminated property are contaminated. The property owner must prove to The Health Department that the vehicles are not contaminated. The authorized contractor provides the expertise in determining if the vehicle is contaminated or not. In some cases The Health Department may have already sampled suspect vehicles. Reports from The Health Department will indicate whether or not contamination in a vehicle has already been confirmed.

Property owners and authorized contractors have several options for the assessment and remediation of vehicles found on contaminated property or vehicles impounded by law enforcement for hazardous chemical processing. The Health Department assumes that the vehicle is contaminated and it becomes the burden of the property owner to hire an authorized contractor to assess and potentially remediate the vehicle.

- The authorized contractor may assess the vehicle by following the steps outlined below for "Vehicle Assessment". If after the assessment, the vehicle is determined to be uncontaminated then it may remain onsite, if secured, or be released.

- The authorized contractor may assume that the vehicle is contaminated and have the vehicle destroyed by following the guidance below for "Vehicle Removal / Disposal".

- The authorized contractor may assume that the vehicle is contaminated and submit a decontamination strategy in the work plan submitted for the remediation of the subject site. In the case of an impounded vehicle, then a work plan shall be submitted for the decontamination of the vehicle. Decontamination strategies should address all the points outlined in the section on "Vehicle Decontamination".

Vehicle Assessment

The first step in properly assessing vehicles is to remove all the solid waste. The presence and disposal of hazardous chemicals, equipment or materials must be documented and included in the final report.

The acceptable method used for confirming contamination within vehicles present on contaminated property includes both of the following:

1. Air monitoring with a calibrated 10.6 eV photoionization detector (PID), or other approved air-monitoring instrument (consult with The Health Department).

    - If air-monitoring instrumentation indicates that contaminant concentrations exceed the current state decontamination standard[22] (above background concentrations), then the vehicle is contaminated.

2. A minimum of one, four-point composite, totaling 100cm^2, methamphetamine wipe from the interior of the vehicle. For larger vehicles or vehicles with multiple compartments, more samples will be required.

    - If the total concentration of methamphetamine exceeds the current state cleanup level then the vehicle is contaminated.

Any contaminated vehicle may either be decontaminated or destroyed. Follow the guidance below for these options.

On contaminated property, the authorized contractor is also responsible for assessing the area below the vehicle. Even if the vehicle rests on an impermeable surface the area surrounding that surface should be assessed to ensure a release has not occurred. A thorough assessment will include the following and may require the vehicles to be staged elsewhere on the property to access the area underneath:

1. A visual observation of soils to investigate areas of staining, distressed-vegetation, etc.

2. At a minimum, one PID Field Screen sample, see Appendix A-2, from the soils underneath the vehicle. Additional field screen analyses for all areas of visual impact.

3. Authorized contractors are required to report any indicators that would suggest other contaminants that may not be revealed by PID field screening (metals, oils, pesticides, etc.) and may result in further sampling and disposal.

If field screen analysis indicates elevated levels of total VOCs, then follow the guidance presented in the previous section “Burn Pits / Impacted Soils / Debris Piles”.

[22] Washington Administrative Code 246-205-541

Vehicle Removal / Disposal

There are several methods for legally removing and/or disposing of vehicles. The chosen method will depend on the circumstances surrounding the vehicle or the contaminated property where it was located. Below are the likely scenarios authorized contractors will encounter when assessing, disposing, or remediating vehicles with potential hazardous chemical contamination.

1. *The vehicle is located on a contaminated property, and The Health Department or authorized contractor has determined that the vehicle is contaminated, but has not placed an unfit for use health order on the vehicle title through the department of licensing.*

   This scenario is most likely due to the fact that the vehicle is inoperable, of low value, and unlikely to be removed from the property. In order to expedite the disposal procedure, The Health Department does not go through the formal process of placing an unfit for use health order on the vehicle title. If the vehicle disappears, then The Health Department will place an unfit for use health order on the vehicle title through the department of licensing. If the vehicle is inoperable, of low-value, and contaminated then it will likely qualify as a Junk Vehicle, and The Health Department can provide the authorized contractor with a Junk Vehicle Affidavit. This form outlines a process that an authorized contractor can legally use to notify the legal and registered owners that the vehicle in question is to be destroyed. The registered or legal owner has a period of time (currently 15 days) to "claim" the vehicle, before the authorized contractor can have the vehicle removed by a registered hulk hauler to be destroyed. It is important that the authorized contractor receive documentation from either the hulk hauler or the scrap processing facility identifying the vehicle and affirming that it has been destroyed.

   If The Health Department issues an unfit for use health order to be placed on the title of the vehicle through the department of licensing, the process requires a 30 day appeal period and further Health Department documentation between the department of licensing, hulk hauler, and scrap processing facility. Once the appeal period has passed and the registered or legal owner has not initiated a decontamination through an approved work plan and authorized contractor, the vehicle is forfeit to The Health Department. [23] The Health Department will coordinate with the authorized contractor and the authorized contractor's hulk hauler for the vehicle's removal and destruction. The Health Department may need to accompany the authorized contractor's hulk hauler to the scrap processing facility.

[23] RCW 64.44.045, 64.44.050

See the department of licensing's website regarding contaminated vehicles for further information on the process of "branding" the vehicle as contaminated or decontaminated.

If the legal or registered owner does contact the authorized contractor to claim the vehicle within the Junk Vehicle Affidavit proscribed waiting period, then the authorized contractor shall direct them to contact The Health Department. The Health Department will explain the options available to the legal or registered owner.

1. *The vehicle is located on contaminated property, The Health Department has not assessed the vehicle for contamination, the property owner or registered owner wants to keep the vehicle, and the vehicle does not qualify as a junk vehicle.*

   The authorized contractor must assess the vehicle. Thorough assessment includes air screening with a calibrated PID, removal of all solid waste, and collecting at least one four-point composite methamphetamine residue surface sample, totaling 100 cm^2.

   If the vehicle contains total VOC results above the decontamination standard[24], has a significant risk of a threatened release, or has methamphetamine contamination above the decontamination standard, then the vehicle is unfit for use. The vehicle may be decontaminated or destroyed.

   If the registered or legal owner wishes to destroy the vehicle they can provide the vehicle title to the authorized contractor who can then turn the vehicle over to a hulk hauler for scrap processing. It is important the authorized contractor receive documentation from either the hulk hauler or the scrap processing facility identifying the vehicle and affirming that it has been destroyed.

   If the property owner cannot provide a vehicle title to the authorized contractor then The Health Department may issue a Junk Vehicle Affidavit. Now that the vehicle has been determined to be contaminated it may meet enough requirements to qualify as a Junk Vehicle. The Junk Vehicle Affidavit outlines a process that an authorized contractor can legally use to notify the legal and registered owners that the vehicle in question is about to be destroyed. The registered or legal owner has a period of time (currently 15 days) to "claim" the vehicle, before the authorized contractor can have the vehicle removed by a registered hulk hauler to be destroyed. It is important the authorized contractor receive documentation from either the hulk hauler or the scrap processing facility identifying the vehicle and affirming that it has been destroyed. If the legal or

[24] WAC 246-205

registered owner does contact the authorized contractor to claim the vehicle within the 15 day waiting period, then the authorized contractor shall direct them to contact The Health Department. The Health Department will explain the options available to the legal or registered owner.

If the property owner, registered owner, or legal owner cannot or will not provide a vehicle title and the vehicle still does not meet the requirements of a Junk Vehicle, The Health Department will place an unfit for use health order on the title of the vehicle through the department of licensing. This process requires a 30 day appeal period and further Health Department documentation between the department of licensing, hulk hauler, and scrap processing facility. Once the appeal period has passed and the registered or legal owner has not initiated a decontamination through an approved work plan and authorized contractor, the vehicle is forfeit to The Health Department. [25] The Health Department will coordinate with the authorized contractor and the authorized contractor's hulk hauler for the vehicle's removal and destruction. The Health Department may need to accompany the authorized contractor's hulk hauler to the scrap processing facility.

See the department of licensing's website regarding contaminated vehicles for further information on the process of "branding" the vehicle as contaminated or decontaminated.

If the registered or legal owner wishes to decontaminate the vehicle, then follow the guidance outlined below in "Vehicle Decontamination".

2. *The vehicle is located on contaminated property, The Health Department has not assessed the vehicle for contamination, the property owner and registered owner do not want the vehicle, and the vehicle does not qualify as a junk vehicle.*

The authorized contractor must assess the vehicle. Thorough assessment includes air screening with a calibrated PID, removal of all solid waste, and collecting at least one four-point composite methamphetamine residue surface sample, totaling 100 cm^2.

If the vehicle contains total VOC results above the decontamination standard[26], has a significant risk of a threatened release, or has methamphetamine contamination above the decontamination standard, then the vehicle is unfit for use. The vehicle may be decontaminated or destroyed.

[25] RCW 64.44.045, 64.44.050
[26] WAC 246-205

The registered or legal owner can provide the vehicle title to the authorized contractor who can then turn the vehicle over to a hulk hauler for scrap processing. It is important the authorized contractor receive documentation from either the hulk hauler or the scrap processing facility identifying the vehicle and affirming that it has been destroyed.

If the property owner, registered owner, or legal owner cannot provide a vehicle title to the authorized contractor then The Health Department may issue a Junk Vehicle Affidavit. Now that the vehicle has been determined to be contaminated it may meet enough requirements to qualify as a Junk Vehicle. The Junk Vehicle Affidavit outlines a process that an authorized contractor can legally use to notify the legal and registered owners that the vehicle in question is about to be destroyed. The registered or legal owner has a period of time (currently 15 days) to "claim" the vehicle, before the authorized contractor can have the vehicle removed by a registered hulk hauler to be destroyed. It is important the authorized contractor receive documentation from either the hulk hauler or the scrap processing facility identifying the vehicle and affirming that it has been destroyed.

If the vehicle is not contaminated, does not qualify as a Junk Vehicle, and the property owner does not have a title or want the vehicle, then the vehicle can be removed by a registered tow truck operator once the real property on which the vehicle is located has been determined to be refit for reuse. See the department of licensing's website regarding abandoned vehicles for further information.

3. *The vehicle is located in a law enforcement impound yard.*

The Health Department will assess the vehicle, and if it is determined to be unfit for use, issue an unfit for use health order to be placed on the title of the vehicle through the department of licensing. This process requires a 30 day appeal period and further Department documentation between The Health Department of licensing, hulk hauler, and scrap processing facility. Once the appeal period has passed and the registered or legal owner has not initiated decontamination through an approved work plan and authorized contractor, the vehicle is forfeit to The Health Department. [27] The Health Department will arrange for the vehicles destruction.

If the registered or legal owner hires an authorized contractor to decontaminate the vehicle, the authorized contractor shall submit a work plan for the vehicles relocation, security, and decontamination. The vehicle removed from impound shall be placed in a secure location (for example, an authorized contractors gated/secured yard, or another

[27] RCW 64.44.045, 64.44.050

impound facility). The process for decontaminating a vehicle is outlined below in "Vehicle Decontamination". In all instances, the removal of a vehicle from law enforcement impound shall be coordinated through The Health Department. Law enforcement may require impound fees be paid prior to allowing the vehicles removal.

See the department of licensing's website regarding contaminated vehicles for further information on the process of "branding" the vehicle as contaminated or decontaminated.

4. *The vehicle has been assessed by The Health Department or an authorized contractor, is unfit for use and is being held by an insurance company or insurance company's representative.*

   The vehicle may be either decontaminated or destroyed. The vehicle title should be available through the insurance company, and can be used as proper documentation to be given to a registered hulk hauler for scrap processing. It is important the authorized contractor receive documentation from either the hulk hauler or the scrap processing facility identifying the vehicle and affirming that it has been destroyed. In the event that the insurance company or vehicle owner will want to decontaminate the vehicle follow the process for decontaminating a vehicle as outlined below in "Vehicle Decontamination".

Vehicle Decontamination

Proper decontamination of a contaminated vehicle shall include:

- Disposal of debris and porous materials (headliners, carpets, upholstery, etc.)
- Complete dismantling and decontamination of HVAC systems.
- Disposal of fan-cooled electronic components (i.e. amplifiers, stereo systems).
- Physical decontamination of remaining surfaces/items.
- Post Decontamination Confirmation Sampling for residual methamphetamine, each sample totaling 100cm^2. The frequency of samples will be determined by The Health Department, and will be collected as outlined in Appendix A-3.
- Air screening for total VOCs with a calibrated photoionization detector (PID), equipped with 10.6 eV UV gas discharge lamp for confirmation of contamination reduction.

Samples and air screening must meet the decontamination standards established in the WAC.[28]

[28] WAC 246-205-541

Outbuildings

Authorized contractors should consider outbuildings as potentially habitable structures. Many times the actual manufacture of methamphetamine will take place within an outbuilding such as a shed or barn-like structure. Authorized contractors should review property reports and communicate with The Health Department to determine the likelihood of contamination. Keep in mind that The Health Department assumes the structure is contaminated and requires the property owner to prove it is not. The authorized contractor provides the expertise in assessing whether the structure is contaminated or safe for use. Assume The Health Department is going to require the outbuilding to be thoroughly assessed, including methamphetamine residue wipe sample collection.

Attics/ Storage Areas

Attics or storage areas such as an “eave”, located on contaminated property must be assessed and, if assessment indicates contamination, remediated. If an attic space is proven to be uncontaminated through comprehensive assessment, including pre-assessment methamphetamine residue wipe sample collection, then it may be sealed-off from the rest of the structure and left “as is” during the remainder of the remediation.

If the authorized contractor assumes contamination or a comprehensive assessment indicates that it is contaminated then the space will have to be remediated.

In most cases, unfinished attics and eaves can be remediated using the following guidelines:

- Removal of debris. This includes solid waste, personal items, and insulation.
- Thorough vacuuming and/or hand washing of the entire area.
- Encapsulation of the entire area with a color-tinted heavy duty encapsulant that is rated for asbestos containment.
- The authorized contractor must be aware that the area will be visually inspected and post decontamination confirmation sampled by The Health Department to ensure complete encapsulation has occurred.

These areas must be closely examined as pathways of cross contamination into other units/areas. If pathways exist, the authorized contractor shall inform The Health Department. The Health Department may require further assessment to delineate the extent of the contamination into adjacent units and/or properties. The Health Department will notify the property owner and authorized contractor if additional assessment and remediation is going to be required.

Crawlspaces

Air quality should be assessed before remedial activity begins. Crawlspaces should only be entered if air quality is satisfactory and/or proper personal protective equipment (PPE) is employed. Due to the confined nature of most crawlspaces authorized contractors are urged to utilize the “buddy system” when conducting remedial activities.

Authorized contractors must completely remove all solid waste and thoroughly inspect the soils and/or flooring for chemical impact. These spaces are generally unlit; therefore adequate lighting is necessary to properly evaluate the conditions of the soil or ground cover. Refer to the previous section “Burn Pits / Impacted Soil / Debris Piles” for guidance on proper soil assessment and remediation methods.

These areas must be closely examined as pathways of cross contamination into other units/areas. If pathways exist, the authorized contractor shall inform The Health Department. The Health Department may require further assessment to delineate the extent of the contamination into adjacent units and/or properties. The Health Department will notify the property owner and authorized contractor if additional assessment and remediation is going to be required.

Appliances

Three remediation options exist for most household appliances.

1. The authorized contractor may pre-assess the appliances by collecting a four-point composite sample, totaling 100 cm^2, from each appliance. If the concentration of methamphetamine is at or below the current cleanup standard then the item may be salvaged. If the concentration of methamphetamine is greater than the current cleanup standard then the item will have to be decontaminated (see option 2, below) or destroyed (see option 3, below).

2. The appliance may be decontaminated and then the authorized contractor must add one or two samples to the number of post decontamination confirmation samples required by The Health Department.

3. The Authorized contractor must spray down the appliance, render it inoperable, and then dispose of it properly. If this is performed outside of a structure every attempt shall be made to capture the rinse water. Waste disposal facility (WDF) operators shall be notified that materials are from a contaminated property. Photo documentation is required to ensure that appliances have been rendered inoperable.

Note: Due to fan driven mechanisms of refrigerators, freezer units, microwaves and clothes dryers and the tendency for drug lab "cooks" to use them, those appliances shall be rendered inoperable and properly disposed.

HVAC Systems

The decontamination of Heating, Ventilation, and Air Conditioning (HVAC) systems is an integral part of any contaminated property clean-up project. Often these systems become a collection site for residual methamphetamine and, as sampling has historically demonstrated, can be the most contaminated. Additionally, these systems have the potential to reintroduce contaminants onto cleaned surfaces. HVAC systems must be remediated prior to post sampling. The Health Department must be confident that HVAC systems have been decontaminated and pose no risk of re-contaminating the structures that they serve.

Forced Air Systems

A professional HVAC service company must conduct the decontamination of forced air systems. A forced air system includes the furnace components, the furnace housing and the associated ducting. Additionally, the HVAC service company should follow the most current National Air Duct Cleaners Association (NADCA) developed standard, ACR 2006[29]. This standard will address the entire HVAC system.

The work plan must describe the process employed by the HVAC service company. The description must address the following: mechanical cleaning methodology, mechanical agitation, collection devices, service openings, component cleaning, coil surface cleaning and contact vacuuming.

The professional HVAC service company is allowed access to decontaminate the HVAC system before the structure, which it serves, is decontaminated. The following conditions must be met:

- The removal of all items from the structure (the "Trash-Out" phase) has been completed prior to entry by the HVAC service professional(s).

- The HVAC service professional(s) are briefed and follow the Health & Safety Plan detailed in the submitted and approved work plan. This includes appropriate use of Personal Protective Equipment.

- An authorized contractor's supervisor is onsite at all times.

[29] National Air Duct Cleaners Association, 2006. Assessment, Cleaning, and Restoration of HVAC Systems ACR 2006. Sufka & Associates. National Air Duct Cleaners Association, 44p.

- After the HVAC system is decontaminated it must be adequately "sealed" to ensure that the subsequent decontamination of the structure will not cause intrusion of liquid solutions into the system.

- All post decontamination confirmation samples will be collected once both the structure and the HVAC system have been decontaminated.

In some cases, analysis of the collected confirmation samples may indicate that the HVAC system was not successfully remediated, but the structure, which it serves, was successfully remediated. In these instances it is appropriate to attempt another decontamination of the HVAC system, but not the structure. Additional containment steps are required to prevent the decontamination of the HVAC system from re-contaminating the structure.

To ensure that HVAC system decontamination does not re-contaminate the structure, HVAC service companies should employ the Level 2 Containment Engineering Strategy as outlined in the *Guideline to Assessment, Cleaning, and Restoration of HVAC Systems ACR 2006* "Containment Engineering Strategies" of the NADCA standard[30]. Additional or more stringent engineering controls may be employed to ensure re-contamination does not occur. After complete HVAC remediation has been completed, additional post decontamination confirmation samples will be required to ensure adequate decontamination was achieved. Finally, photo-documentation of the clean ducts must be submitted in the final report.

A list of local NADCA certified HVAC service companies and the NADCA published standard is located at: www.nadca.com

Flexi-Duct

Flex duct used in HVAC systems has a tendency to trap more particulates than standard metal ducts due to the unevenness of the inside walls. Wherever possible these ducts must be removed and disposed of, including from accessible crawl spaces under structures as well as from attics.

If the flex duct cannot be removed and replaced without wall demolition, then the best possible cleaning method should be proposed in the submitted work plan for Health Department approval.

The failure to disclose and remove obvious removable flex ducting will result in a failed final inspection.

[30] National Air Duct Cleaners Association, 2006. Guideline to assessment, Cleaning, and Restoration of HVAC Systems ACR 2006. *Sufka & Associates*. National Air Duct Cleaners Association, 44p.

Internally Lined (Insulated) Ducting

Ducts will occasionally have internal liners used for noise reduction. These internal liners are considered porous surfaces, and must be disposed. The Authorized contractor may elect to dispose of the entire duct system or attempt to remove the liner and then remediate the duct system as described above in "Forced Air Systems".

Baseboard & "Cadet" Systems

These systems have to be completely decontaminated or removed. Authorized contractors should use any means necessary to ensure total remediation.

Note: Disassembly will be required and any visible particulate remaining will result in a failed final inspection. These systems should be left disassembled to facilitate the final inspection process

If corrosion is present in baseboard or Cadet electric heaters, then these units must be removed and disposed.

Stoves

Complete decontamination of all accessible areas is required. This includes removal of stove contents and physical decontamination of inside and outside surfaces. If a "stove" system serves multiple areas within a structure through ducting, then it must be decontaminated in the same manner as a forced air system.

Miscellaneous Exhaust Systems

Bathroom ventilation fans, kitchen exhaust fans, homemade exhaust/ventilation systems and associated ductwork must either be decontaminated thoroughly or removed completely. These items must be closely examined as pathways of cross contamination into other units/areas and will be closely examined at the time of the final inspection.

Demolition

Structures to be demolished must be assessed for hazardous materials prior to demolition activities. The assessment will require removing the majority of the solid waste to ensure that all hazardous chemicals, materials, and equipment have been removed, including: all solid waste from storage areas, attics, closets, piles, boxes, bags, etc. Items that can remain in the structure include the furniture and a small amount of personal items.

For the purpose of this guidance document, a small amount is the quantity that would cover less than 50% of the room's floor that the waste is located in, if it was laid out in a single layer. Photo documentation will be required in the final report to ensure that proper assessment of the structures interior contents was completed prior to the demolition.

The authorized contractor is solely responsible for making all notifications and ensuring all survey and permitting requirements have been met. Authorized contractors shall request a "Critical Areas Checklist" to determine if additional permitting or inspection requirements exist. Alternatively, the authorized contractor can obtain this information themselves by searching the following website for the subject parcel:

http://yakima.co.pierce.wa.us/CriticalAreas/

Permits

The International Building Code (IBC) allows for up to 500 square feet of non-load bearing walls, etc., to be demolished without a building permit. Additionally, one story detached accessory buildings equal to or less than 200 square feet are exempt from permitting requirements. Any project exceeding this scope will require a building permit from the local building official to legally demolish the structure or partial structure.

The City of Tacoma will require a demolition permit for any interior demolition work regardless of scope.

Refer to the following section entitled "Asbestos" for further guidance regarding demolition projects.

Most local building departments follow the International Building Code standards, but authorized contractors are responsible for meeting any additional requirements set forth by the local building official.

Sewer Capping Permits

City of Tacoma

Sewer capping is addressed when obtaining the demolition permit. The authorized contractor must ensure that the sewer has been capped within five feet of the property line. A City of Tacoma Building Inspector must approve the capping prior to backfilling.

Since the City of Tacoma has no requirements on when the sewer is capped (before or after the demolition) it is possible to obtain a "Fit for Use" from The Health Department without an approved final inspection from the City of Tacoma. It is the authorized contractor's responsibility to ensure compliance with all applicable state and local regulations.

Pierce County Sanitary Sewer System Service Area

Demolition projects performed in the Pierce County sanitary sewer system service area require a sewer-capping permit to be obtained from the Pierce County Annex. Additionally, sewers must be capped and approved prior to the start of the demolition**.** Sewer Contractors registered with Pierce County must cap the sewer**.** Once capping has been completed, the Sewer Contractor will notify Pierce County Planning and Land Services (253.798.4050) that an inspection is needed. A Pierce County inspector will then come out and approve of the capping. After approval is granted the demolition project may move forward.

A map of the Pierce County sanitary sewer system service area can be located here:

http://www.piercecountywa.org/xml/abtus/ourorg/pwu/sewer/Service_Area_Map.pdf

Alternatively, the Pierce County Public Works and Utilities - Sewer Utility can be contacted at (253)798-4050.

The authorized contractor has two options for sewer capping:

1. Sub-contract the sewer capping to a Registered Sewer Contractor. A CDL supervisor must be onsite at all times during the actual sewer capping and during the county inspection. Copies of all permits and other documents generated during the course of the sewer-capping process must be included within the Final Report.

2. The authorized contractor may become a Registered Sewer Contractor. Contact the Pierce County Sewer Utility for instructions on how to become a Registered Sewer Contractor.

Demolition of Manufactured Homes and Travel Trailers

These structures may be demolished in place and then taken to the appropriate Waste Disposal Facility (WDF), or transported intact, as a single unit to a permitted landfill. The Waste Disposal Facility will make the decision whether or not to accept the manufactured home or trailer. In both cases, the authorized contractor will inform the WDF supervisor that the structure or waste may be contaminated with hazardous chemical residues.

The structures to be demolished must be assessed for hazardous materials prior to demolition activities. This assessment will require removing the majority of the solid waste to ensure that all hazardous waste has been removed. This includes all solid waste from storage areas, attics, closets, piles, boxes, bags, etc. Items that can remain in the structure include the furniture and a small amount of personal items.

For the purpose of this guidance document, a small amount is a quantity that would cover less than 50% of the room's floor that the waste is located in, if it were laid out in a single layer. Photo documentation will be required in the Final Report to ensure that proper assessment of the structures interior contents was completed prior to the demolition.

Authorized contractors should obtain written acknowledgement from the WDF supervisor indicating that the facility will accept contaminated waste. Such written statements should include a date, address of the location from which the waste originated, description of the waste, signature and contact telephone number of the WDF supervisor.

Authorized contractors demolishing mobile homes and travel trailers will require an Asbestos Survey and subsequent necessary abatement prior to demolition.

The authorized contractor is solely responsible for making all notifications and ensuring all survey and permitting requirements have been met. Authorized contractors shall request a "Critical Areas Checklist" to determine if additional permitting or inspection requirements exist. Alternatively, the authorized contractor can obtain this information themselves by searching the following website for the subject parcel:

http://yakima.co.pierce.wa.us/CriticalAreas/

Refer to the above section “Recreational Vehicle Holding Tank Assessment” for guidance on the proper assessment and disposal of holding tank contents associated with travel trailers.

Demolition Contractor Certification Requirements

In the case of demolition projects, The Health Department will allow the authorized contractor to use the services of a person not certified by the department of health for the decontamination of clandestine drug labs to operate the heavy equipment associated with the demolition or to transport waste material (including whole structures) under the following conditions:

- The individual(s) must hold a current 40 hour Hazardous Waste Operations and Emergency Response Certification.
- An authorized contractor’s supervisor must be on site at all times during the demolition activity.
- The authorized contractor must have authorization and clearance from the WDF supervisor to dispose of the contaminated waste.

Asbestos

Asbestos Surveys are required for any demolition project in Washington State, including mobile homes and travel trailers. Even if the local building official does not require a demolition permit, the Puget Sound Clean Air Agency (PSCAA) will require an Asbestos Survey.

If you are planning a demolition of a structure with a roof area of over 120 square feet, you must file a Notice of Intent form with the PSCCA regardless of the presence of Asbestos Containing Material (ACM).

Submit the Notice of Intent, a copy of the Asbestos Survey and the filing fee to the PSCAA (Fees are listed on the Notice of Intent form). Copies of these documents MUST be retained for inclusion in the final report submitted to The Health Department.

A Notice of Intent must be filed with the PSCCA if friable (readily crumbled, pulverized, or reduced to powder by hand pressure) ACM greater than or equal to 10 linear feet or 48 square feet will be abated.

All ACM (friable and non-friable) must be properly abated and disposed of prior to demolition.

Only licensed asbestos abatement contractors may abate ACM. The authorized contractor may sub-contract the asbestos abatement portion of the remediation to a person not certified by the department of health for the decontamination of clandestine drug labs but is a certified asbestos abatement contractor under the conditions specified in points 9-11 of the "Washington State Department of Health Asbestos Guidelines for CDL Decontamination Projects" (Appendix A-5).

Renovations

If suspected ACM is going to be disturbed over the course of the remediation, then an Asbestos Survey must be completed. If the material is friable ACM, then the authorized contractor must ensure that the material is properly abated and disposed; in the case of ceilings, encapsulation may be allowed.

A Notice of Intent must be filed with the PSCCA if friable ACM greater than or equal to 10 linear feet or 48 square feet will be abated.

Submit the Notice of Intent, a copy of the Asbestos Survey and the filing fee to the PSCAA (Fees are listed on the Notice of Intent form). Copies of these documents MUST be retained for inclusion in the final report submitted to The Health Department.

Disposal of Asbestos

Asbestos-containing waste must be disposed at a disposal site authorized to accept asbestos waste within 10 days of its removal.[31]

Authorized contractors will also need to ensure that specific waste tracking guidelines are followed. This involves completing a Waste Authorization Form that includes information about the approximate quantity of the material to be disposed.

Contact the Puget Sound Clean Air Agency (PSCAA) directly at asbestos@pscleanair.org or (206) 689-4058 for a list of Asbestos Disposal Facilities. Waste Authorization Forms and Notices of Intent can be downloaded at the PSCAA website, http://www.pscleanair.org

The information presented above regarding permits, Asbestos Surveys, Notices of Intent, and disposal is for reference only. Authorized contractors are ultimately responsible for ensuring that they and their sub-contractors are in compliance with all applicable state and local requirements.

Questions regarding demolition permits or asbestos surveys should be directed to the appropriate agency.

Authorized contractors must include copies of all permits, Asbestos Surveys, Waste Authorization Forms, Notices of Intent, waste acceptance statements, appropriate certifications for workers and any other regulatory documentation generated during the course of the remediation/abatement in the final report.

[31] PSCAA - Regulation III, Section 4.07a

Encapsulation

Encapsulation is not usually accepted as a method of contamination reduction in Pierce County. It is The Health Department's goal to reduce contamination within the structure to meet Washington State cleanup standards[32]. Encapsulation does not remove contamination, and no data is available to support its effectiveness of sealing in contaminants for extended periods of time and stress.

Conditions may exist that require special consideration. Popcorn ceilings may be encapsulated if they are proven to contain asbestos through an Asbestos Survey. Unfinished wood in attic / storage areas / crawl spaces that could not serve as a living space without extensive remodeling may be encapsulated if the attempt to clean the unlivable areas would cause an environmental or structural integrity concern. Post samples must be obtained after encapsulation to prove that the contaminants have been sealed. Electrical rooms or other areas of water sensitivity may also be considered for encapsulation and will be discussed on a case-by-case basis.

In order for The Health Department to consider encapsulation as a potential form of remediation, the authorized contractor must demonstrate the following conditions.

Popcorn Ceilings

1. The ceiling must test positive for asbestos containing material (ACM), as indicated by an AHERA certified Asbestos Survey, and be in an undamaged condition. If the popcorn texture is not ACM, and therefore not subject to additional regulatory requirements regarding abatement and disposal, then the authorized contractor will be required to decontaminate the surface through traditional means. If the ceiling is damaged then it will require abatement.

2. Indicate, via a written statement to be included in both the work plan and final report, that the authorized contractor believes the encapsulation will meet the intent of the Illegal Clandestine Drug Lab Cleanup Regulation (Chapter 246-205 WAC), and such a procedure will remove any significant public health threat to individuals occupying the areas where encapsulation was used as a form of remediation.

[32] Washington Administrative Code 246-205-541

Unfinished Wood in Attics/Storage Areas/Crawl-Spaces

1. Provide justification that decontamination of the area using standard practices would cause an environmental or structural issue. Statements must contain a detailed written description of the space, construction materials and photo-documentation.

2. Demonstrate, via a detailed written description of the space, construction materials and photo-documentation, that the area could not reasonably be used as a living space without remodeling.

3. Indicate, via a written statement to be included in both the work plan and final report that the authorized contractor believes that encapsulation will meet the intent of the Illegal Clandestine Drug Lab Cleanup Regulation (Chapter 246-205 WAC), and such a procedure will remove any significant public health threat to individuals occupying the area.

Methamphetamine Surface / Wipe Sampling

The Washington Administrative Code (WAC 246-205-541, Decontamination Standards) lists four decontamination standards to determine if a structure is fit for re-occupancy:

- Methamphetamine of less than or equal to 1.5 µg/100cm^2.
- Total Lead of less than or equal to 20 µg/ft^2.
- Mercury of less than or equal to 50 ng/m^3 in air.
- Volatile Organic Compounds (VOCs) of 1ppm total hydrocarbons and VOCs in air.

Most individuals involved in contaminated property remediation understand that many different hazardous chemicals associated with methamphetamine can contaminate a structure and render it unsafe for occupation. Of the four standards listed above only two, methamphetamine and VOCs, are regularly used during contaminated property remediation. Lead and Mercury are typically encountered only in rare situations (e.g. P2P or "Amalgam" type clandestine drug labs). However, as new drugs are being illicitly manufactured, used, distributed, or stored other conditions may exist where lead and/or mercury may be present on a property that has been declared an illegal drug lab (e.g. MDMA [Ecstasy]).

Pre-Decontamination Sampling

Situations will arise that require the authorized contractor to obtain methamphetamine surface samples prior to decontamination. In these cases it is important for the authorized contractor to enter into the sample event with the correct perspective.

The structure(s) or area(s) is/are assumed to be contaminated. Biased samples are collected in an attempt to support this assumption. Biased samples are samples obtained from the most likely areas of contamination. If biased sampling does not support the assumption, then the structure(s) or area(s) is/are considered to be free of contamination.

Pre-Decontamination samples should only be obtained after The Health Department has reviewed and approved a submitted Pre-Decontamination Sample Plan. A complete Pre-Decontamination Sample Plan will contain all of these key elements:

- Property Information
- Client Information

- Authorized contractor Information
- Authorized contractor Work Crew Information
- Laboratory Information
- Structure Specific Information
    - Room Size
    - Room Contents
    - Construction Materials of Floors, Sub Floors, Walls and Ceilings
- Sample Protocol
- Site Diagram
- Site Sample Diagram
- Sample Table
- Health & Safety Plan
- Timeline

Once a Pre-Decontamination Sample Plan has been submitted, The Health Department will review the document to ensure these key elements have been addressed and are accurate. Careful attention will be given to sample location and frequency. The number of samples required to accurately assess an area for contamination will depend on several factors such as size, types of construction materials, ventilation, usage, etc. The Health Department will use all available information to decide if more sampling than what has been proposed in the Pre-Decontamination Sample Plan will be required.

Composite Sampling

Methamphetamine composite sampling is a cost effective method of determining the overall hazardous chemical contamination of a structure. Composite samples are used to obtain a general concentration of methamphetamine contamination within a particular area.

Follow the guidelines[33] established by the Washington State Department of Health for the collection of methamphetamine composite surface samples.

Discrete Sampling

Authorized contractors may consider discrete sampling if they are not confident that the methamphetamine decontamination standard has been achieved. Discrete sampling will allow for a more specific determination of where contamination exists.

Follow the guidelines[34] established by the Washington State Department of Health for the collection of methamphetamine discrete surface samples.
Combining discrete and composite sampling is acceptable. For example, a CDL supervisor may elect to obtain discrete samples in areas of high contamination and reserve composite samples for less impacted areas. Composite sampling can be useful in rooms where methamphetamine concentration and variability is expected to be lower.

Post Decontamination Confirmation Sampling

To declare a property "Refit for Reuse", The Health Department must feel confident that hazardous chemical contamination has been remediated to the point of compliance with the current Washington State Decontamination Standards. In order to comply with these cleanup standards The Health Department and authorized contractor will follow the protocol outlined in Appendix A-3.

The protocol outlines a process by which the authorized contractor is made aware of the number of post samples that will be required to confirm successful decontamination for each structure/area on any specific contaminated property remediation site. A "Post Decontamination Sample Frequency Form"[35] will be given to the authorized contractor upon a request to the Health Department for information pertaining to the subject site. This form will indicate the maximum number of samples that may be obtained to confirm successful remediation for all structures/areas requiring post decontamination confirmation sampling.

After the authorized contractor has finished the necessary remediation, an appointment is scheduled with The Health Department to collect post samples. Health Department staff, with the help of the authorized contractor, will then collect the samples. Security seals are placed over the container holding the samples and custody is signed over to the authorized contractor. The authorized contractor is then responsible for ensuring the samples are transported to the chosen accredited laboratory for analysis.

The authorized contractor's main responsibility is in ensuring that the structure is properly decontaminated and ready for post decontamination confirmation sampling. Additionally, the authorized contractor will be responsible for ensuring that all sample materials are brought to the site at the scheduled date and time.

[26, 34] Washington State Department of Health Clandestine Drug Lab Program. 2005. Guidelines for Environmental Sampling at Illegal Drug Manufacturing Sites. *Washington State Department of Health Pub 334-106*. Office of Environmental Health & Safety.

[35] Appendix A-3.16

It is important to note that these guidelines do not preclude authorized contractors from collecting/analyzing samples prior to scheduling an appointment with Health Department staff. However, the determination of "Refit for Reuse" will be based on the samples collected in conjunction with Health Department staff.

If the post decontamination confirmation samples indicate that areas within the structure remain contaminated, those areas within the structure must undergo another decontamination cycle. Once further decontamination is complete, another sample collection appointment is scheduled with The Health Department. The process continues until all areas within the structure(s) have been successfully remediated. All appointments beyond the first will be charged the current one-hour review fee.

Prior to scheduling additional sample events, the authorized contractor must submit the sample results and a description of the process they will employ to further decontaminate the non-compliant areas and how they will ensure these methods will not cross-contaminate areas that achieved compliance.

Final Inspections

The Health Department will perform a final inspection during the post decontamination sample collection event. The purpose of the final inspection is to ensure that statements contained in the work plan are accurate and that all areas of concern have been remediated. The final inspection also serves to ensure the authorized contractor has clearly identified all areas on the property that may require remediation. If what The Health Department inspector observes does not concur with what has been stated in the work plan then the contractor will perform the additional work needed, submit supporting documentation, submit an explanation for the discrepancy and a payment of the current one hour review fee. Further final inspections and/or sample events may be required to verify the additional remediation meets The Health Department's standards.

Site Visits & Pre Decontamination Sample Plans

At the property owner's request, an authorized contractor may assess an "Unfit for Use" property for the purpose of determining a cost proposal for remediation. Authorized contractors may respond to this request without notifying The Health Department. However, it is highly advised that authorized contractors contact The Health Department prior to the site assessment to acquire any information The Health Department may have on file. It is highly advised that authorized contractors contact "Police and Sheriff's Non Emergency Communications" (253.798.4722) to inform law enforcement that they will be onsite.

Authorized contractors must submit a pre-decontamination sample plan and receive approval from The Health Department prior to collecting any samples from the property. This includes asbestos, septic waste, soil, surface-water and groundwater samples. There will be no fee for the review of the pre-sample plan. Authorized contractors must receive written approval, from The Health Department, of the pre-decontamination sample plan prior to performing the activities described in the pre-decontamination sample plan.

In any case where the authorized contractor is performing activities beyond a visual inspection or air monitoring for personal safety issues, the authorized contractor must receive written approval from The Health Department.

In any case in which an authorized contractor, or hired sub-contractor, is present on an "Unfit for Use" property, at least one authorized contractor affiliated Washington State Department of Health Certified Drug Lab Cleanup Supervisor must be present.

Follow the guidance described in the above section, "Methamphetamine Surface / Wipe Sampling", for information on the required key elements of a pre decontamination sample plan.

Report Writing

All reports submitted to The Health Department (pre-decontamination sampling plans, work plans, final reports, and any addendums) must be written in a concise and grammatically correct manner. This includes the proper use of tenses. For example, The Health Department has received final reports in which decontamination procedures have been described in future tense. A person not involved in the regulatory process (e.g. a judge) could question if the property has been cleaned, or if it will be cleaned in the future (and thus has not been cleaned at the time of the final report). Therefore, sampling and decontamination procedures and other actions described in the work plan must be written in future not past tense. Actions described in the final report must be written in past tense to reflect that decontamination and sampling have been accomplished.

Information shall be site specific. The use of templates is allowed as a means to efficiently produce reports. However, reports must be amended to represent the actual situation at the specific site. Confusion arising out of contradicting site descriptions, sampling procedures, etc., must be avoided. For example, The Health Department has received work plans in which procedures detailing how to deal with vehicles were described, but the site description said that no vehicles were encountered. In this case the disposal procedure should have either been omitted in the work plan or mentioned in a conditional sentence (i.e. "If any vehicles are encountered, then…").

All documentation must be clear and concise. Photographs should be labeled with the date and location (which building, room) of where they have been taken. If the sampling templates do not show the sample ID, the pictures should be labeled accordingly. Sample IDs must be consistent in the sampling table, sampling diagram and chain of custody. Sampling tables must include the appropriate units for the substance to be measured. In most cases this will be parts per million [ppm] for volatile organic compounds (VOC) and microgram per 100 square centimeter [$\mu g/100\ cm^2$] for methamphetamine samples. Without the units, the numbers are meaningless.

The Health Department will return reports with significant errors to the authorized contractors for correction. It is our goal to produce accurate documentation that can be understood by persons not involved in the clean-up process and can withstand legal scrutiny.

APPENDICES

A-1

Waste Manifest Form

Authorized contractor		Waste Disposal Facility	
Name:		**Name:**	
Address:		**Address:**	
Telephone:		**Telephone**	
Certification Number:		**Origin of Waste:**	

Waste	Quantity	Weight/Volume

Transporter	Receiver
_____	_____
Signature & Date	**Signature & Date**

Items listed on this form were obtained from a site regulated by the Tacoma-Pierce County Health Department as a property contaminated by methamphetamine, its precursors or by-products. Items may be contaminated with hazardous substances associated with the use and manufacture of methamphetamine.

A-2

Field Screening and Headspace Analysis with a Photoionization Detector

Soil & Water Photoionization Detectors (PID) Field Screen

Photoionization detectors must be calibrated prior to each sampling event, and equipped with a 10.6 eV or higher voltage gas discharge UV lamp.

1. Label a sterile container with sample ID number.
2. Put on clean pair of gloves.
3. Fill glass jar or plastic bag to half full with soil or water.
4. Place aluminum foil tightly over mouth of the jar or seal the plastic bag.
5. Photograph sample at sample location, and retain photo to include in the work-plan and/or the final report.
6. Note location of sample on site map for inclusion in work-plan and/or the final report.
7. Warm contents to room temperature, approximately 70° F.
8. Gently shake contents.
9. The probe of the portable PID is then poked through the foil or plastic.
10. Wait for reading to stabilize and record.

Note: This procedure must first be performed with soil/water from the same general area of concern, but that is presumed to be free of contamination. A reading is obtained and recorded as the background concentration. Further samples are collected, measured and compared to the background concentration. The same type of collection container (jar, baggie, etc) used for the background sample must also be used for the remaining samples.

A-3

The Health Department Post-Decontamination Confirmation Sample Protocol (Jar)

To accommodate different sample collection containers (Jars Vs. Vials), and therefore the ability to "pre-moisten" the filter paper and carry numerous sample containers in a caddy, two protocols are presented. The differences between the two protocols are small, but to facilitate the ease of use the two protocols are presented in their entirety, separately.

A. The Health Department Post Sampling Process Overview

1. The authorized contractor contacts The Health Department and schedules an appointment. Appointments can be made Monday – Thursday, excluding holidays.

2. Health Department staff and authorized contractor arrive onsite.

3. The Health Department conducts a Final Inspection.

4. If the remediation effort passes the Final Inspection, then both parties can proceed with the post decontamination sample event. If the remediation effort fails the Final Inspection, then The Health Department will communicate at the time of inspection and/or in writing the areas that require further attention. Once the authorized contractor has completed the additional labor, provided supporting documentation, and paid the current one-hour review fee to The Health Department, then the authorized contractor may schedule another appointment.

5. The authorized contractor and Health Department staff collect post decontamination confirmation samples as out-lined below.

6. Custody is signed over to the authorized contractor and security tape is then placed on the container holding the samples.

7. Samples are transported to the authorized contractor's chosen accredited laboratory following strict chain of custody protocol.

8. If ANY sample within an area indicates methamphetamine contamination greater than the current cleanup level, then the entire area must be decontaminated and post decontamination sampled again.

For example, if three discrete samples from a bedroom are obtained and one of the samples indicates that contamination is present above the Washington State Cleanup Level for methamphetamine, then the entire room must be decontaminated again.

9. Once additional decontamination has occurred, and the authorized contractor is confident that the area has been successfully remediated, The Health Department shall be notified and steps 1-8 are repeated.

NOTE: ***Additional sample events conducted by The Health Department beyond the initial event, will be charged at the current Health Department "one hour review fee".***

B. Off-Site Sample Preparation (Performed by authorized contractor)

1. Fill out sample labels with the following information and place labels on sample collection containers (jars):
    a. Sample ID
    b. Site Address
    c. Date of Sample Event

2. Wash hands and put on fresh pair of gloves.

3. Label the sample templates by recording the date of the sample event and the sample ID number. Place all templates in an unused sealable container, such as a plastic bag. Securely seal the container.

4. Wash hands and put on fresh pair of gloves.

5. Fold filter papers into quarters and place into sample collection containers (jar). Only one filter paper per container *(This step may be performed by the laboratory).*

6. Prepare "The Health Department Post Decontamination Confirmation Sample Summary Form" (A-3.14 & A-3.15) by completing all fields with the following exceptions:
    a. Date of Sample Collection
    b. Time of Sample Collection
    c. Sample Location

7. Collect all the materials to be brought to the subject site at the scheduled time:
    a. Gloves

b. Booties
c. Methanol in stopper bottle or a container with a similar mechanism
d. Required amount of labeled sampling collection containers (jars) containing pre-folded filter paper.
e. Sample Caddy
f. 100 cm^2 templates
g. Duct Tape and Push Pins
h. Chain of Custody Sheet
i. Sample Summary Sheet
j. Writing Tool
k. Camera
l. Cooler
m. Blue-Ice, or similar cooling device

C. On-site Sample Preparation (Performed by authorized contractor)

1. Determine the location of the "Clean Zone". The "clean zone" is an area at the subject site where there is minimal risk of introducing methamphetamine contamination during the sample preparation/collection process.

2. In an organized and accessible manner place all materials listed in B(7) in the "Clean Zone".

D. On-Site Sample Preparation (Performed by Health Department Staff)

1. Perform the following steps in the “Clean Zone”.

    a. Put on a fresh pair of gloves.

    b. Remove lids from sample collection containers (jars), placing them top down on a disposable contamination-free surface.

    c. Saturate filter papers with methanol until wet but not dripping (approximately 40 drops, or 2 milliliters). Excess methanol should be poured onto a paper towel and properly disposed.

    d. Secure lids tightly on containers.

    e. Place sample collection containers in the sample caddy.

    f. Place disposable gloves in the sample caddy.

E. Template Placement, Photo-documentation and Location Recording (Performed by authorized contractor & Health Department Staff)

1. Health Department staff will serve as the Sample Collector.

2. The authorized contractor will serve as the Record Keeper.

3. The Sample Collector and Record Keeper put on a fresh pair of gloves.

4. The Sample Collector places templates at desired locations.

5. The Record Keeper photo-documents template location (to include a reference point) and records the location on “The Health Department Post Decontamination Confirmation Sample Summary Form”.

6. Continue steps E(4 & 5) until all templates have been placed and the locations are documented.

F. Discrete Sample Collection (Performed by authorized contractor & Health Department Staff)

1. Health Department staff will serve as the Sample Collector.

2. The authorized contractor will serve as the Record Keeper.

3. The Record Keeper records the date and time of the sample event on the "Sample Summary Form".

4. The Sample Collector and Record Keeper put on fresh pairs of gloves.

5. The Sample Collector removes the pre-moistened filter paper from the sample collection container (jar), closes the container and hands the sample collection container (jar) to the Record Keeper.

At this point the Sample Collector is only holding the moistened filter paper and the Record Keeper is holding the relevant sample collection container (jar) and the sample caddy (containing the remaining sample collection containers and disposable gloves)

6. The Record Keeper and Sample Collector go to the first/next sample location.

   The Sample Collector performs the following sample collection steps:

   a. Grasp the folded filter paper between the thumb and fingers. Place the filter paper on the surface to be sampled. Press down firmly, but not excessively, with the fingers, being careful not to touch the sample surface with the thumb.

   b. First Wipe: Using firm pressure, horizontally wipe the surface within the template side to side in an overlapping "Z" pattern. Wipe so that the entire selected surface area is covered. End with a scooping motion. Avoid wiping the template.

   c. Second Wipe: Open the wipe and fold the sampled side in. With a clean section exposed, vertically wipe the surface within the template side to side in overlapping "N" pattern. Wipe so that the entire selected surface area is covered. End with a scooping motion. Avoid wiping the template.

   d. Fold the filter paper so the sampled side is folded in.

e. Rough surfaces should be “blotted” uniformly, rather than wiped.

f. The Record Keeper opens the sample collection container (jar).

g. Sample Collector inserts the folded filter paper into the sample collection container (jar).

h. Record Keeper secures the lid and places the container back into the sample caddy.

i. Sample Collector and Record Keeper put on a fresh pair of gloves.

j. Record Keeper retrieves the next sample collection container (jar) (Kept in the sample caddy).

7. Repeat steps F(5 & 6) until all samples have been collected.

8. Sample Collector places all sample containers into the cooler.

9. Sample Collector relinquishes custody of the samples to the Record Keeper

10. Record Keeper completes the “Chain of Custody” and receives custody of the samples.

11. Security tape is placed over the container holding the sample jars.

12. The samples are transported to the authorized contractor’s chosen accredited laboratory for analysis, following strict chain of custody protocol.

13. The Health Department and authorized contractor await results from the analytical laboratory.

The Health Department Post Decontamination Confirmation Sample Protocol (Vial)

A. The Health Department Post Sampling Process Overview

1. The authorized contractor contacts The Health Department and schedules an appointment. Appointments can be made Monday – Thursday, excluding holidays.

2. Health Department staff and authorized contractor arrive onsite.

3. The Health Department conducts a Final Inspection.

4. If the remediation effort passes the Final Inspection, then both parties can proceed with the post decontamination sample event. If the remediation effort fails the Final Inspection, then The Health Department will communicate at the time of inspection and/or in writing the areas that require further attention. Once the authorized contractor has completed the additional labor, provided supporting documentation, and paid the current one-hour review fee to The Health Department, the authorized contractor may schedule another appointment.

5. The authorized contractor and Health Department staff collect post decontamination confirmation samples as out-lined below.

6. Custody is signed over to the authorized contractor and security tape is then placed on the container holding the samples.

7. Samples are transported to the authorized contractor's chosen accredited laboratory following strict chain of custody protocol.

8. If ANY sample within an area indicates methamphetamine contamination greater than the current cleanup level, then the entire area must be decontaminated and post decontamination sampled again.

   For example, if three discrete samples from a bedroom are obtained and one of the samples indicates that contamination is present above the Washington State Cleanup Level for methamphetamine, then the entire room must be decontaminated again.

9. Once additional decontamination has occurred, and the authorized contractor is confident that the area has been successfully remediated, The Health Department shall be notified and steps 1-9 are repeated.

NOTE: ***Additional sample events conducted by The Health Department, beyond the initial event, will be charged at the current Health Department "one hour review fee".***

B. Off-Site Sample Preparation (Performed by authorized contractor)

1. Fill out sample labels with the following information and place labels on sample collection containers (vials):
    a. Sample ID
    b. Site Address
    c. Date of Sample Event

2. Wash hands and put on fresh pair of gloves.

3. Label the sample templates by recording the date of the sample event and the sample ID number. Place all templates in an unused sealable container, such as a plastic bag. Securely seal the container.

4. Wash hands and put on fresh pair of gloves.

5. Pre fold the required amount of filter papers into quarters.

6. Place the folded filter papers together in a separate container, such as a sealable baggie (filter paper container), instead of the sample collection container (vial). The "filter paper container" must contain at least enough filter papers to account for all samples to be collected.

7. Prepare "The Health Department Post Decontamination Confirmation Sample Summary Form" (A-3.14 & a-3.15) by completing all fields with the following exceptions:
    a. Date of Sample Collection
    b. Time of Sample Collection
    c. Sample Location

8. Collect all the materials to be brought to the subject site at the scheduled time.
    a. Gloves
    b. Booties

c. Methanol in stopper bottle or a container with a similar mechanism
d. Required amount of empty labeled sample collection containers (vials)
e. A “filter paper container” with the required amount of pre-folded filter papers
f. 100 cm^2 templates
g. Duct-Tape and Push Pins
h. Chain of Custody Sheet
i. Sample Summary Sheet
j. Writing Tool
k. Camera
l. Cooler
m. Blue-Ice, or similar cooling device

C. On-site Sample Preparation (Performed by authorized contractor)

1. Determine the location of the “Clean Zone”. The “clean zone” is an area at the subject site where there is minimal risk of introducing methamphetamine contamination during the sample preparation process.

2. In an organized and accessible manner place all materials listed in B(7) in the “Clean Zone”.

D. Template Placement, Photo-documentation and Location Recording (Performed by authorized contractor & Health Department staff)

1. Health Department staff will serve as the Sample Collector.

2. The authorized contractor will serve as the Record Keeper.

3. The Sample Collector and Record Keeper put on a fresh pair of gloves.

4. The Sample Collector places templates at desired locations.

5. The Record Keeper photo-documents template location (to include a reference point) and records the location on “The Health Department Post Decontamination Confirmation Sample Summary Form”.

6. Continue steps D(4 & 5) until all templates have been placed and the locations are documented.

E. Discrete Sample Collection (Performed by authorized contractor & Health Department staff)

1. Health Department staff will serve as the Sample Collector.

2. The authorized contractor will serve as the Record Keeper.

3. The Record Keeper records the date and time of the sample event on the "Sample Summary Form".

4. The Sample Collector and Record Keeper put on fresh pairs of gloves.

5. While in the clean zone, the Sample Collector removes a pre-folded filter paper from the "filter paper container", and saturates the filter paper with methanol until wet but not dripping (approximately 40 drops, or 2 milliliters). The Record Keeper takes custody of the sample collection container (vial).

   At this point the Sample Collector is only holding the moistened filter paper and the Record Keeper is only holding the sample collection container (vial)

6. The Record Keeper and Sample Collector go to the first/next sample location.

   The Sample Collector performs the following sample collection steps:

   a. Grasp the folded filter paper between the thumb and fingers. Place the filter paper on the surface to be sampled. Press down firmly, but not excessively, with the fingers, being careful not to touch the sample surface with the thumb.

   b. First Wipe: Using firm pressure, horizontally wipe the surface within the template side to side in an overlapping "Z" pattern. Wipe so that the entire selected surface area is covered. End with a scooping motion. Avoid wiping the template.

   c. Second Wipe: Open the wipe and fold the sampled side in. With a clean section exposed, vertically wipe the surface within the template side to side in overlapping "N" pattern. Wipe so that the entire selected surface area is covered. End with a scooping motion. Avoid wiping the template.

   d. Fold the filter paper so the sampled side is folded in.

   e. Rough surfaces should be "blotted" uniformly, rather than wiped.

f. The Record Keeper opens the sample collection container (vial).

g. Sampler inserts the folded filter paper into the sample collection container (vial).

h. Record Keeper secures the lid and places the container into the cooler (Kept in the “Clean Zone”).

7. Sample Collector and Record Keeper put on a fresh pair of gloves.

8. Repeat steps E(5 - 7) until all samples have been collected.

9. Sample Collector places all sample containers into the cooler.

10. Sample Collector relinquishes custody of the samples to the Record Keeper.

11. Record Keeper completes the “Chain of Custody” and receives custody of the samples.

12. Sample Collector places security tape over the container holding the samples.

13. The samples are transported to the authorized contractor’s chosen accredited laboratory for analysis, following strict chain of custody protocol.

14. Health Department staff and authorized contractor await results from the analytical laboratory.

Example Materials for the Health Department Post Decontamination Sample Protocol

To further clarify The Health Department post decontamination sample protocol, examples of a: sample container label, a sample template, a Health Department Post Decontamination Confirmation Sample Frequency Form, and a Health Department Post Decontamination Confirmation Sample Summary Form are provided. Please read the following explanatory notes for each item.

Sample Container Label

- The example is not to scale.
- The authorized contractor must fill out the sample container label (see section B1 of The Health Department Post Decontamination Confirmation Sample Protocol).
- "Red" words indicate the portion to be filled out.
- Sample container labels may include more information than the example presented, but not less.

Sample Template

- The example is not to scale.
- The authorized contractor is to fill out the template (see section C3(b) of The Health Department Post-Decontamination Confirmation Sample Protocol).
- "Red" words indicate the portion to be filled out.
- Sample container labels may include more information than the example presented, but not less.

The Health Department Post Decontamination Confirmation Sample Frequency Form

- Health Department staff will complete this form with information gained during the initial health department assessment. This form will be included in the information given to authorized contractors upon request.
- "Red" words indicate the portion that will be filled out by Health Department staff from information gained during the initial assessment.

The Health Department Post Decontamination Confirmation Sample Summary Form

- The authorized contractor ("Record Keeper") will complete this form during the post decontamination sample event based on what the Health Department staff ("Sample Collector") determines to be the sample locations. This form, along with photo-documentation and chain of custody forms, will enable the user to know when and where the samples were collected.

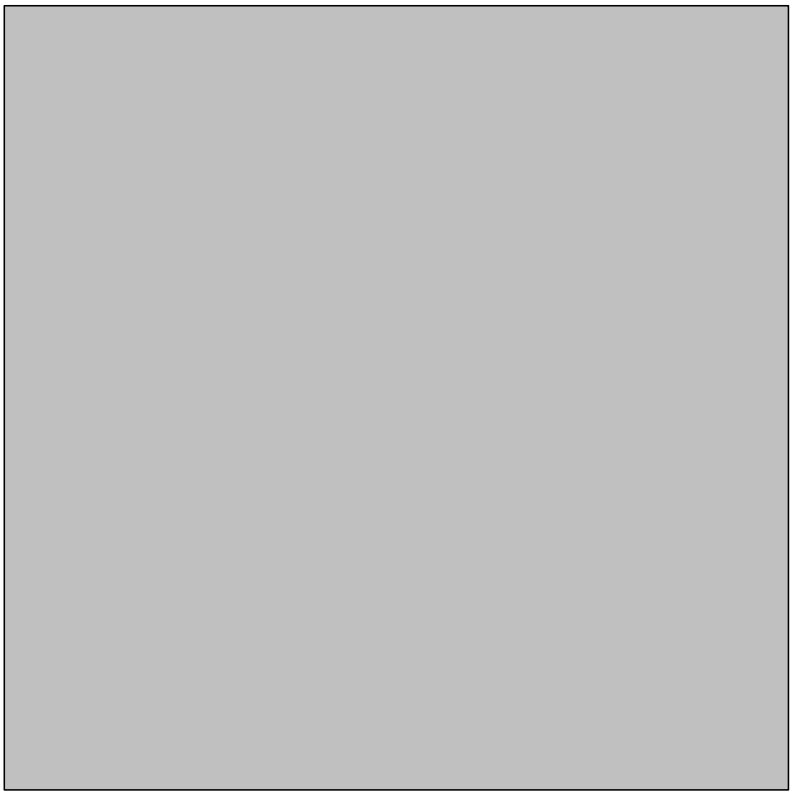
- "Red" words indicate the portion that will be filled out by the authorized contractor during the post decontamination sample event (see section E5 of The Health Department Post Decontamination Confirmation Sample Protocol for Jars, or section D5 of The Health Department Post Decontamination Confirmation Sample Protocol for Vials).

Example Sample Container Label and Template

Sample ID: S-1

Address: 12345 Regulator St., City, State, Zip

Date: 3.1.07



Sample ID: S-1 Date: 3.1.07

Tacoma-Pierce County Health Department

Post-Decontamination Confirmation Sample Frequency Form

Date Assessed: 1.1.07

Site Address: 12345 Regulator St.
City, State, Zip Code

Structure	Number of Samples to Confirm Decontamination
Cabin	12
Shed	4

Tacoma-Pierce County Health Department

Post-Decontamination Confirmation Sample Summary Form

Address of Sample Event: 12345 Regulator St. City, State, and Zip Code

Date of Sample Collection: 3.1.07 Time of Sample Collection: ~ 2:00pm

Sample ID	Structure	Location
S-1	Cabin	Main Room, N-Wall
S-2	Cabin	Main Room, S-Wall
S-3	Cabin	Main Room, E-Wall
S-4	Cabin	Main Room, W-Wall
S-5	Cabin	Main Room, Ceiling
S-6	Cabin	Main Room, Floor
S-7	Cabin	Main Room, Counter
S-8	Cabin	Bath – N-Wall
S-9	Cabin	Bath, S-Wall
S-10	Cabin	Bath, Floor
S-11	Cabin	Bath, Counter
S-12	Cabin	Attic, S-Rafter
S-13	Shed	N-Wall
S-14	Shed	S-Wall
S-15	Shed	E-Floor
S-16	Shed	W-Floor

Tacoma-Pierce County Health Department

Post-Decontamination Confirmation Sample Frequency Form

Date Assessed: Site Address:

Structure	Number of Samples to Confirm Decontamination

Tacoma-Pierce County Health Department

Post-Decontamination Confirmation Sample Summary Form

Address of Sample Event:

Date of Sample Collection: Time of Sample Collection:

Sample ID	Structure	Location

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MTCA Method A Cleanup Levels

Substance	Groundwater	Soil
	(ug/L)	(mg/kg)
Arsenic	5	20
Benzene	5	0.03
Benzo (a) pyrene	0.1	0.1
Cadmium	5	2
Chromium (Total)	50	NL
VI	NL	19
III	NL	2,000
DDT	0.3	3
1,2-Dichloroethane (EDC)[36]	5	
	L (Ethylene Dichloride, Ethylene chloride)	
Ethylbenzene	700	6
Ethylene dibromide (EDB) [37]	0.01	0.005
Lead	15	250
Lindane	2	0.01
Methylene chloride	5	0.02
Mercury	2	2
MTBE[38]	20	0.1
Naphthalene	160	5
PAH (carcinogenic)	0.1	0.1
PCB Mixtures	0.1	1
Tetrachloroethylene (PCE)[39]	5.0	0.05
Toluene	1000	7
Petroleum (with benzene)	800	30
Petroleum (with out benzene)	1000	100
Diesel	500	2,000
Heavy oils	500	2,000
Mineral oils	500	4,000
1,1,1-Trichloroethane[40]	200	2.0
Trichloroethylene (TCE)[41]	5	0.03
Vinyl chloride	0.2	NL
Xylenes (Total)	1000	9

NL = No Established Cleanup Level

Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC, Amended February 12, 2001, Washington State Department of Ecology Toxics Cleanup Program, Publication No. 94-06

[36] Ethylene Dichloride, Ethylene chloride
[37] 1,2-Dibromoethane, Ethylene bromide
[38] methyl tert-butyl ether

[39] Ethylene tetrachloride, Perchloroethylene, Tetrachloroethene, PERC
[40] Methyl chloroform, Chlorothene, Trichloroethane
[41] Trichloroethene, Acetylene trichloride, Ethinyl trichloride, Trilene

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Asbestos Guidelines at Clandestine Drug Labs

The following guidelines have been issued by the Washington State Department of Health (October 2, 2002), and are reprinted here for convenience.

Washington State Department of Health
Asbestos Guidelines for CDL Decontamination Projects

Asbestos regulations, 296-62 Part I-1 WAC, are overseen by the Washington State Department of Labor and Industries. In coordination with Labor and Industries, the following guidelines have been developed for assistance while conducting clandestine drug lab decontamination projects.

1. *Clandestine drug lab decontamination work plans shall include a section addressing the presence or absence of asbestos in the structures to be decontaminated or demolished.*
2. *Building owners must make an assessment to determine if asbestos is present and may potentially be disturbed during decontamination or demolition. The building owner must provide an asbestos report to the contractor prior to any construction work. The report will typically be a Good Faith Survey, by a certified AHERA building inspector.*
3. *To assist in making a determination as to whether or not an AHERA inspection is required, a distinction needs to be made between construction and custodial projects. Construction projects include work where the building materials are removed or potentially damaged by the work. Custodial projects include work where building contents are removed and resilient surfaces are cleaned without being damaged.*
4. *CDL decontamination construction projects require an AHERA inspection since it is reasonable to assume that asbestos will possibly by disturbed during construction activities. If the building owner has documentation, such as a previous survey or construction records, they may use these to prepare their report, but need to check that the documents are current. An AHERA inspection is not required if the building owner assumes that materials contain asbestos and have them handled as asbestos.*

5. *CDL decontamination custodial projects typically do not require an AHERA inspection since it is reasonable to assume that asbestos would not be disturbed by custodial activities. However, if it were determined that custodial work may disturb the building material, it would then be considered a construction activity. An example of this is custodial activities on popcorn ceilings could disturb the building material. Also consider that the Authorized contractor may encounter suspect asbestos-containing building material debris and require the building owner to survey the materials before proceeding with work. Providing a survey prior to work can prevent such delays.*

6. *Demolition projects require an assessment, a Good Faith Survey, by a certified AHERA building inspector to determine if asbestos is present and will be disturbed during demolition.*

7. *Asbestos-containing material that will be disturbed during decontamination or demolition requires abatement by a Certified Asbestos Contractor.*

8. *Asbestos-containing materials that will not be disturbed during decontamination do not require remediation by a Certified Asbestos Contractor. An authorized contractor may perform the necessary decontamination work.*

9. *It is generally recommended that asbestos cleanup be conducted after initial or final stages of CDL decontamination have been completed to minimize CDL related hazards in the asbestos work area. However, actual procedures and timing will be determined on a case-to-case basis.*

10. *Asbestos work can generally be subcontracted to a Certified Asbestos Contractor who is not CDL certified when the following conditions can be met. The asbestos abatement contractors must:*

    - *Be briefed on the CDL risks and hazards specific to the site to ensure worker safety and correct PPE selection. The Authorized contractor may require additional PPE for the asbestos workers.*
    - *Work only in those areas where asbestos abatement work is conducted.*
    - *Only perform tasks specific to the asbestos abatement unless their workers are CDL certified.*
    - *Take into account contaminants from the drug lab when disposing of asbestos materials.*

11. *Building owners and authorized contractors must abide by L&I asbestos regulations. Refer to Chapter 296-62 WAC, Part I-1 and Chapter 296-65 WAC.*

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Guidelines for Disposal of Dangerous Waste at Unfit for use property

The following guidelines have been issued by the Washington State Department of Health (October 2, 2002), and are reprinted here for convenience.

A variety of chemicals found at clandestine drug lab manufacturing sites are designated as dangerous waste. To protect the environment and health of Washington's communities, proper disposal of this waste is essential. Management and disposal of dangerous waste generated in Washington is regulated by the Dangerous Waste Regulations, Chapter 173-303 WAC.

The Washington State Department of Ecology (Ecology) removes clandestine drug lab (cdl) hazardous wastes and Local Health Jurisdictions (LHJ) oversee the remediation of contaminated properties.

Circumstances arise where certified cdl decontamination contractors find chemicals after Ecology has left the site. The following protocols should be followed when this occurs.

1. Newly Found Chemicals: Department certified decontamination contractors should contact Local Health staff when additional chemicals or high-hazard chemical containers such as ammonia cylinders and HCl generators, not mentioned in the submitted work plan are found onsite.

2. Ammonia Cylinders & HCl Generators: Do not touch the cylinders or generators. Do not conduct any work in the area. Call the WA State Department of Emergency Management at 1-800-258-5990. Your message will be relayed to the appropriate regional Ecology office and you will receive a call back.

3. Small Quantity Generator (SQG): Any dangerous waste found at unfit for use property is linked to the physical address, making the property owner the SQG, not the cdl decontamination contractor. The property owner may then contract with the decontamination contractor to provide the services of designation, and/or transport of the dangerous waste to a disposal facility.

Small quantity generators are exempt from most of the state and federal regulations if they remain within these limits:

- *Generate up to 220 pounds of dangerous waste or up to 2.2 pounds of certain pesticides or poisons each month or batch at a given site.*

- *Determine if their waste is a dangerous waste.*

- *Manage their waste in a way that does not pose a threat to human health or the environment.*

- *Treat or dispose of their waste legally.*

If over 220 pounds of dangerous waste or 2.2 pounds of certain pesticides or poisons are generated at a cdl site, additional regulation requirements apply. Contact the LHJ for further guidance.

<u>E. Other Dangerous Waste:</u> In addition to clandestine drug lab chemicals left on site, contractors need to screen waste for any other dangerous waste. Contractors may be responsible for disposal of chemicals that appear not to be associated with drug lab manufacturing. The following list is an example of chemicals and items that must be disposed of as dangerous waste. Do not dispose of them by dumping on the ground, in a septic system, in the sanitary sewer or in the garbage. Check with the county regulators for specific guidance and regulations.

- *Oven cleaners*
- *Metal/furniture polishes*
- *Spot removers*
- *Bleaches*
- *Toilet bowl/drain cleaners*
- *Weed killers*
- *Insecticides*
- *Fertilizer with weed killer*
- *Wood preservatives*
- *Gasoline/diesel fuel*
- *Antifreeze*
- *Brake/transmission fluid*
- *Degreasers*
- *Motor oil*
- *Automotive batteries*
- *Driveway sealers*
- *Paints and thinners*
- *Paint removers*
- *Stains and varnishes*
- *Epoxies and adhesives*
- *Solvents*
- *Pool chemicals*

- *Compressed gas cylinders*
- *Containers with unknown/suspect liquids*
- *Products with labels that contain the word DANGER, POISON or FLAMMABLE*
- *Appliances with refrigerant – refrigerators and air conditioners*
- *Mercury containing items such as thermostats and fluorescent light tubes*
- *Computer monitors*
- *Light ballasts (unless marked "No PCBs")*
- *Asbestos, sharps and contaminated soil require special handling and in some cases permits*

DISPOSAL PROCEDURES FOR CHEMICALS UNDER 220 POUNDS:

- *Inspect containers for leaks and loose fitting lids*
- *Place chemical containers in plastic buckets making certain to separate them by using one bucket for each container.*
- *Secure buckets for safe transport to hazardous waste facility*
- *Provide completed paperwork to disposal facility*

DISPOSAL FACILITIES BY COUNTY

Benton County
Moderate Risk Waste Facility
3102 Twin Bridges Rd
Richland WA 99352
509 942-7387

Island County
Recycle Hazardous Waste
20062 State Route 20
Coupeville, WA 98239
360 679-7386

King County
Philips Services
800 327-7759

Kitsap County
Moderate Risk Waste Facility
5551 Imperial Way

Bremerton, WA
360 337-5777

Kittitas County
Kittitas County Solid Waste
Moderate Risk Waste Facility
925 Industrial Way
Ellensburg, WA 98926
509 962-7577
509 962-7070

Mason County
Moderate Risk Waste Facility
5551 Imperial Way
Bremerton, WA
360 337-5777 or 360 337-5781

Okanogan County
Moderate Risk Waste
1234A 2nd Ave So
Okanogan, WA 98840
509 422-2602

Pierce County
Philips Services Corp
1629 E Alexander Ave
Tacoma, WA
253 383-3044

Spencer Environmental
800 286-0896

Emerald Petroleum Services
206 832-3100

Skagit County
14104 Ovenell Rd
Mount Vernon, WA 98273
360 424-9532

Snohomish County
Household Hazardous Waste Drop-off Station
3434 McDougall Ave
Everett, WA

425 388-6050

Spokane County

Waste to Energy Plant
2900 S Geiger Blvd
Spokane WA 99204
509 625-7898
Valley Transfer Station
3941 N Sullivan Rd
Spokane WA 99216
509 625-6885

Northside Transfer Station
22123 N Elk-Chattaroy Rd
Elk, WA 99009
509 625-6880

Thurston County

Thurston County HazoHouse
2418 Hogum Bay Rd
Lacey, WA
360 786-5457

Whatcom County

Disposal of Toxic Materials Facility
3505 Airport Drive
360 380-4640

Yakima County

Moderate Risk Waste Facility
Terrace Heights Land Fill
7151 Rosa Hill Drive
Yakima, WA 98081

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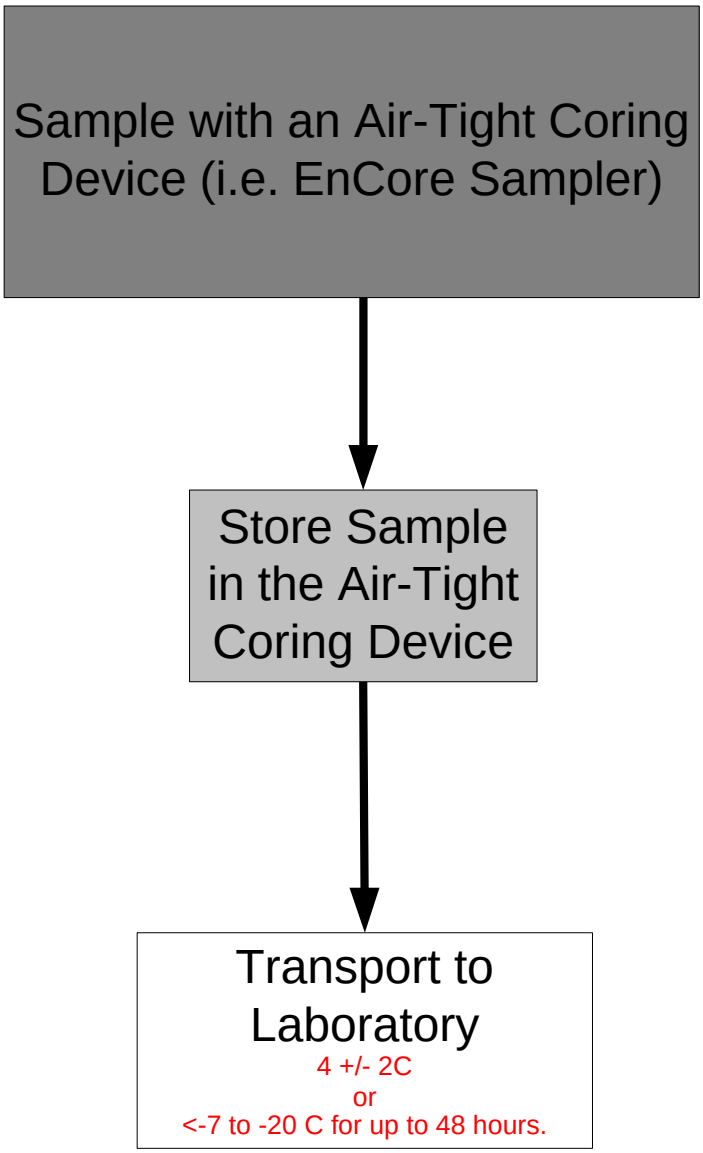
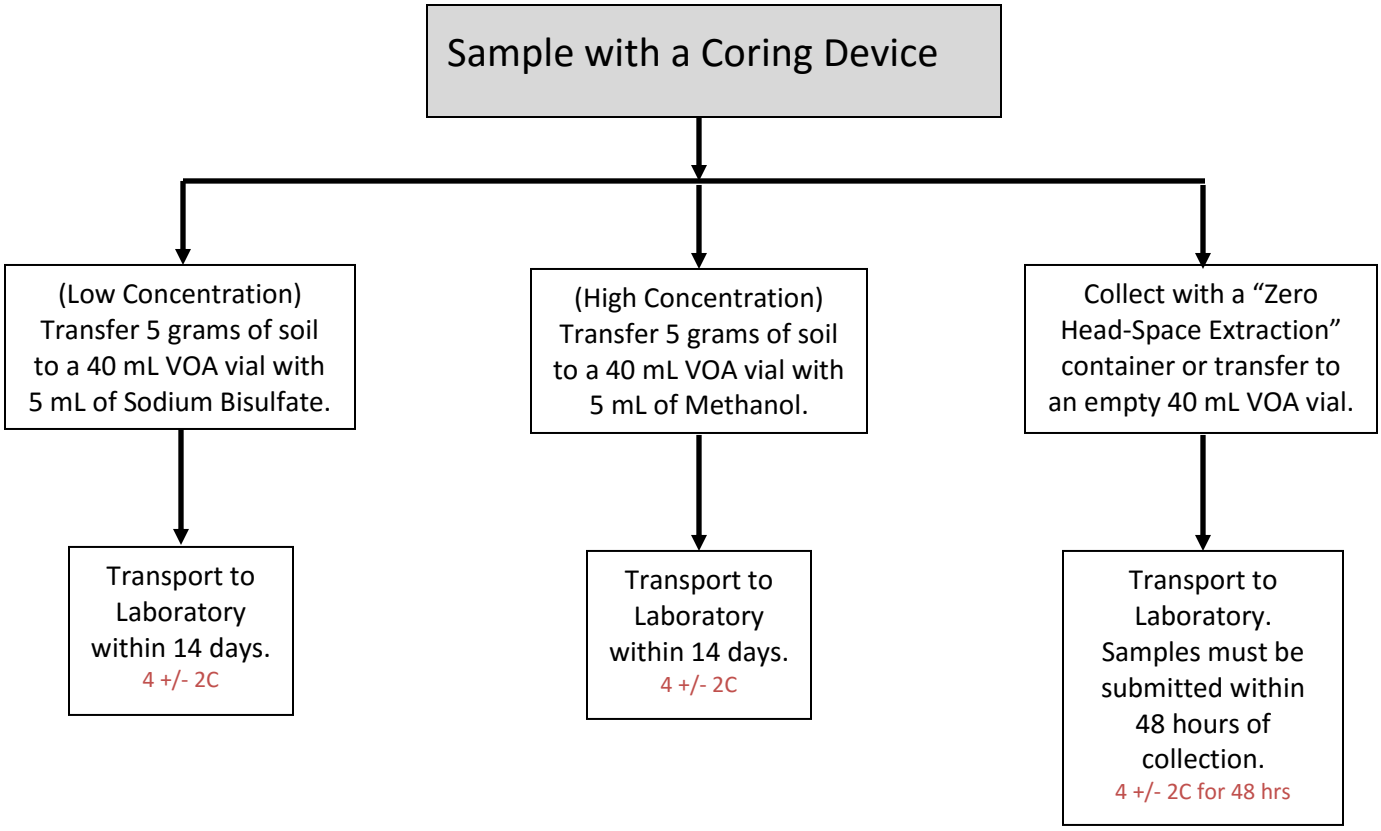
EPA Method 5035A Preservation Flow Charts





Additional jar-packed samples must be collected for every sample, for moisture content analyses.
If using low concentration method, collect an additional 2 samples, per sample location.
If using the low concentration method in sandy soils, use laboratory preservation techniques.

A copy of The Washington State Department of Ecology Publication; "Implementation Memorandum #5 Collecting and Preparing Soil Samples for VOC Analysis", is available for download at the Washington State Department of Ecology website:

http://www.ecy.wa.gov/

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Web Based Resources

Tacoma-Pierce County Health Department
http://www.The Health Department.org

Washington State Department of Health Clandestine Drug Lab Homepage
http://www.doh.wa.gov/ehp/ts/CDL/default.htm

Washington State Department of Ecology
http://www.ecy.wa.gov/ecyhome.html

Washington State Department of Labor & Industries
http://www.lni.wa.gov

Puget Sound Clean Air Agency
http://pscleanair.org

Pierce County Legal Information Network Exchange
http://www.co.pierce.wa.us/cfapps/linx/Search.cfm

Washington Soil Survey Reports
http://www.or.nrcs.usda.gov/pnw_soil/wa_reports.html

Pierce County Assessor – Treasurer, Electronic Property Information Profile
http://www.co.pierce.wa.us/cfapps/atr/epip/search.cfm

Washington Department of Ecology Well Log Viewer
http://apps.ecy.wa.gov/welllog/index.asp

National Air Duct Cleaners Association
http://www.nadca.com