



Commonwealth of Virginia Lead Abatement

INTRODUCTION

The Candidate Information Bulletin (CIB) is intended for your use in the preparation for and understanding of the process and procedure pursuant to your license. The CIB pertains to the Lead Inspector, Lead Supervisor and Lead Risk Assessor.

The Virginia Department of Professional and Occupational Regulation (DPOR), Board for Asbestos, Lead, and Home Inspectors (Board) is responsible for licensing and regulating the profession. The Board, through DPOR, requires an application for licensure. This is required to determine your eligibility for testing. For questions regarding your licensure application or eligibility please contact the Board.

The Board, through DPOR, has contracted with Professional Credential Services, Inc. (PCS) to provide various examination administrative services. For questions concerning the examination scheduling forms, test development, examination administration, scoring and reporting please contact PCS.

EXAMINATION PROCESS

Steps to Testing

1. Obtain Application Form from DPOR web site, www.dpor.virginia.gov. Contact the Board office to request the application to be mailed to you and to answer questions concerning the application or your eligibility.

DPOR
Board for Asbestos, Lead, and Home Inspectors
Perimeter Center, Suite 400
9960 Mayland Drive
Richmond, VA 23233
Licensing Section: 804.367.8595
Email: alhi@dpor.virginia.gov

2. Complete Application Form with other requirements as noted on the application and forward to the Board office.
3. If approved for the examination, you will receive an Interim License or Exam Eligibility Letter from the Board. PCS will send your Examination Scheduling Form to be completed and returned with the examination fee to PCS.

PCS
P. O. Box 198728
Nashville, TN 37219-8689
(Toll free) 877.887.9727
Fax: 615.880.4282
E-mail: valead@pcshq.com
Web site: www.pcshq.com

4. PCS will mail an **Authorization To Test (ATT)** letter to eligible candidates who have submitted a complete Examination Scheduling Form along with the examination fee. You must test within three (3) years of your Board approval. Candidates with an ATT will call PSI to schedule the computer-based examination.
5. Candidates will test at a PSI testing location.
6. PCS receives scores weekly. Scores are mailed out within three (3) business days once they are received from PSI. Failing scores are mailed with rescheduling information. If you fail the exam 3 times, whether one or both parts, you must submit a new application to the Board and meet all current requirements.
7. After passing both parts, scores are sent to the Board within 3-4 business days of receipt.
8. The Board receives the examination scores weekly. No licenses will be issued until the Board has received and confirmed scores.

SPECIAL ACCOMMODATIONS

In accordance with the provisions of the Americans with Disabilities Act, examination administration modifications are available for candidates who qualify. Such candidates must obtain an official form from PCS on which to request special accommodations. The completed form must be returned to PCS with all required documentation 60 days prior to the month in which you wish to schedule an examination.

The Special Accommodation Form can be found on the PCS web site.

Examination Schedule

Examinations are offered on a daily basis using a computer-based testing platform at PSI test centers. The ATT letter will provide eligible candidates with information on how to schedule the examination.

Since PSI tests many different license/certification types please allow 10 business days between the time you call to schedule your examination and the time you wish to sit for the examination. A "seat" may not be available at the time you wish to test if there is not sufficient lead-time in placing your scheduling call.

Test Centers

To locate the nearest authorized testing center, please visit www.psiexams.com or call PSI. In order to schedule an examination appointment, please call PSI at 1-800-211-2754. When calling the toll-free number, please provide your name and identify yourself as a VA Lead Abatement candidate.

Although every attempt is made to provide a quiet and comfortable test environment, noise and room temperatures may be an unforeseen distracter. It is suggested that you bring earplugs and wear the type of dress that would allow you to adapt to a cooler or warmer climate in the test center.

Rescheduling Policy

Candidates who wish to reschedule an examination without forfeiting the examination fee must notify PSI at least three working days prior to the scheduled test date.

You will forfeit your examination fee if you do not appear for your scheduled examination or are not admitted due to lack of proper photo/signature identification.

There will be no refunds.

Admission Requirements

1. You must present your ATT letter and one form of identification with a photograph and your signature (i.e. drivers license, government-issued identification card, or passport) in order to be admitted to the examination room.
2. The identification must be current, clearly recognizable or you may not be admitted to test. If your photo does not have a signature, you must bring a second form of signature identification. If you do not have proper identification, you will not be admitted to test.
3. It is your responsibility to be at the test center on time. Candidates will not be permitted into the examination room after your scheduled testing time. It is strongly suggested that you visit the site before the day of the examination so you are familiar with the route and the travel time.

Items for Use in Examination

1. Calculators will be available on the computer. No other calculators are allowed.
2. Candidates taking the law portion of the examination will be allowed to bring the Virginia Lead-Based Paint Activities Regulations to the test area. This document must not be altered or contain any additional information.

Security Guidelines

The Commonwealth of Virginia copyrights all test questions. Copying, reproducing or taking any action to reveal the contents of an examination in whole or in part is unlawful.

Any irregularity such as an act of impersonation, creating a disturbance, giving or receiving unauthorized information or aid to other candidates, attempting to remove test information by any means, possession of unauthorized notes or equipment may be sufficient cause for your removal from the examination room. All such irregularities will generate a report to the Board and will be considered prior to license approval.

Prior to application approval you completed the Examination Site Conduct Agreement Form. This documents your agreement to abide by the security guidelines above and examination procedures at the Test Center.

No visitors, guests or children are permitted in the examination room.

No food, beverages, notebooks, magazines, backpacks, briefcases, hats, caps, reference books, or electronic devices such as cameras, walkmans, radios, tape players, portable fax machines, cellular telephones, calculator watches, reproduction equipment, beepers or pagers are permitted in the examination room. If any of the aforementioned items are found on a candidate, the Test Center Administrator will collect it until the end of the examination and provide a written report of the incident to the Board and PCS.

Smoking or the use of tobacco is prohibited in the examination room.

EXAMINATION CONTENT

Each examination consists of two-parts and both parts are multiple-choice format. There is no penalty for wrong answers so it is to your advantage to ensure a response has been given to each question. A scaled score of 70 is required to pass. If you fail one part but pass the other you will only be required to retake the part that you failed. You must pass both parts within 3 years of Board approval. Failure to pass either or both parts of the examination 3 times will require the candidate to reapply with the Board.

Outlined below are the specifications for examination along with the number of questions.

Lead Supervisor

Part 1 – Virginia Law

1 Hour Examination; 20 questions

Knowledge of Chapter 5 of Title 54.1.....2
Lead-Based Paint Activities Regulations.....18
(*Virginia Lead-Based Paint Activities Regulation – 100%*)

Part 2 – Technical

1 ½ Hour Examination; 50 questions

Lead Toxicology.....5
(*HUD Guidelines - 100%*)

Worker and Environmental Protection.....12
(*HUD Guidelines - 83%, EPA Federal Register 40 CFR Part 745 - 17%*)

Pre-Abatement Procedures.....3
(*EPA Federal Register 40 CFR Part 745 - 100%*)

Abatement Procedures.....10
(*HUD Guidelines – 90%, OSHA Federal Register - 100%*)

Testing and Monitoring for Lead Hazards.....6
(*HUD Guidelines – 96%, OSHA Federal Register - 4%*)

Post-Abatement Procedures.....6
(*HUD Guidelines 100%*)

Waste Disposal.....8
(*HUD Guidelines 100%*)

The above content outline has been expanded to include the following EPA study topics to assist candidates in preparing for the examination.

Certification of Project Scope of Work

- Reviewing the scope of the work
- Contract specifications
- HUD guidelines applicable to lead-hazard control work
- Evaluation of lead inspection and risk assessment reports
- Recommended and restricted lead-hazard control methods
- Liability issues involved with abatement work Types of insurance applicable to abatement
- Roles of all participants in abatement project
- Record-keeping requirements for abatement projects
- Community relations plans
- Project budgeting

Initial Walkthrough

- Locations where lead may exist in residential environments
- Basic building construction and architecture
- Reading blueprints
- Work area isolation and site security
- Site storage of equipment and waste materials
- Location of containment barriers and shower
- Collection of pre-abatement (baseline) soil and dust samples

Assemble Materials and Documents

- OSHA Lead in Construction Standard
- Definition of OSHA "competent person"
- Worker licenses and certification
- Acceptable worker baseline blood-lead levels
- OSHA General Industry, Hazard Communication and Respiratory Protection standards
- OSHA Construction Standards
- Site-specific health and safety programs
- Requirements for worker training
- Selection, fit and care of respirators
- Worker health and safety needs (other than respirators)
- Equipment and supplies used in lead hazard control work
- Materials which may be used for enclosure and encapsulation

Abatement Site Preparation

- Crew orientation
- How workers prevent taking lead dust home
- Shutting down and sealing HVAC systems
- Set-up of shower, containment and critical barriers
- Required work area signs and waste labels
- Methods for control and abatement of dust, paint and soil

Lead Hazard Control Work

- Potential health hazards from substances other than lead
- Health effects of lead on workers
- Proper use of personal protective clothing and equipment
- Material safety data sheets (MSDSs)
- Routine safety and health meetings
- Containment security and ventilation
- Air-sampling pump calibration
- Air sampling collection procedures
- Reviewing air-sampling results and calculating TWAs
- Frequency and limits of medical monitoring of workers
- Daily cleanup activities in abatement areas
- RCRA waste disposal regulations for abatement projects

Final Cleanup and Clearance

- Definition of "clean" for final clearance
- Proper order and procedures for final cleanup
- Surface-sealing application techniques
- Third-party visual inspection and wipe sampling for clearance
- Elements of the abatement report

General Supervisory and Leadership Skills

- Worker motivation
- Project management

Lead Inspector

Part 1 – Virginia Law

- 1 Hour Examination; 20 questions
- Knowledge of Chapter 5 of Title 54.1.....2
- Lead-Based Paint Activities Regulations.....18
(Virginia Lead-Based Paint Activities Regulation – 100%)

Part 2 – Technical

- 1 ½ Hour Examination; 50 questions
- Lead Toxicology.....5
(HUD Guidelines - 60%, OSHA Federal Register 40 - 40%)
- Inspection Protocol and Methods.....18
(HUD Guidelines - 83%, EPA Federal Register 40 CFR Part 745 - 17%) From 12 to 18 questions
- Sampling Methods.....19
(HUD Guidelines - 96%, EPA Federal Register 40 CFR Part 745 - 4%) From 25 to 19 questions

Post-Abatement Clearance.....8
(HUD Guidelines 100%)

The above content outline has been expanded to include the following EPA study topics to assist candidates in preparing for the examination.

Initial Request for Inspection

- Defining the scope of work
- Roles and responsibilities of an Inspector
- Difference between inspection and risk assessment
- Difference between XRF and paint chip sampling
- Importance of State and local requirements
- HUD and EPA notification and disclosure regulations
- Health effects of lead in adults and children
- Places where lead can be found inside and outside the home
- EPA recommended steps for reducing lead in drinking water
- Goals of HUD lead guidelines
- Information about property needed to provide proposal for inspection
- Information about property needed to determine number of units to inspect
- Basic building and construction technology
- General contract terms and requirements

Preparation for Inspection

- Inspection scheduling
- Licensing and transportation of XRF
- How an XRF analyzer works
- Inspector and occupant safety issues with XRF use
- XRF calibration checks
- Equipment and forms needed for sampling
- OSHA regulations applicable to lead, safety and respiratory protection
- Respirators and other protective equipment
- Types of dosimeters

Pre-inspection Meeting

- Background information about lead use
- Determine construction history
- Calculation of number of units to inspect using HUD tables
- Random selection of units using HUD protocols
- Reading blueprints

The Inspection

- Inventory of painted surfaces
- Sample locations in single family and multi-family dwellings
- Field document: sample location, sketches, HUD forms
- How to take XRF readings
- Performance characteristics sheets (PCS)
- XRF substrate corrections
- Interpretation of XRF readings
- Why POS, NEG and INCONCLUSIVE ranges vary among XRF analyzers
- Data collection from XRF
- Collection of paint chip samples (ppm and mg/cm²)
- Laboratory and chain of custody forms
- Sample labeling
- Methods for analysis of lead
- Interpretation of lab results
- Use of chemical spot-test kits
- Soil sampling methods
- Dust sampling methods

Inspection Report

- How to summarize inspection results
- Contents of inspection report
- Recommendations an Inspector can make

Clearance Testing

The final visual inspection of hazard control activities
Why pre-abatement wipe and soil samples are collected
Why dust samples are collected for clearance
The number and location of clearance wipe samples
How to perform clearance wipe sampling
Calculation of wipe sample results ($\mu\text{g}/\text{ft}^2$)
Wipe sampling clearance standards
What happens when a wipe test fails
The number and location of clearance soil samples
How to perform clearance soil samples
Compositing soil samples

Lead Risk Assessor

Part 1 – Virginia Law

1 Hour Examination; 20 questions

Knowledge of Chapter 5 of Title 54.1.....2
Lead-Based Paint Activities Regulations.....18
(*Virginia Lead-Based Paint Activities Regulation* – 100%)

Part 2 – Technical

1 ½ Hour Examination; 50 questions

Lead Toxicology.....5
(*HUD Guidelines* - 80%, *OSHA Federal Register 40 CFR Part 745* - 20%)
Sampling Strategies.....8
(*HUD Guidelines* 100%)
Clearance Sampling6
(*HUD Guidelines* 100%)
Inspection Protocol and Methods.....16
(*HUD Guidelines* – 100%)
Sampling Methods.....5
(*HUD Guidelines* – 100%)
Designing Inspection Activities and Abatement/Management Procedures.....10
(*HUD Guidelines* - 82%, *EPA Federal Register 40 CFR Part 745* – 18%)

The above content outline has been expanded to include the following EPA study topics to assist candidates in preparing for the examination.

Initial Request for Lead Services

Objectives of initial contact with client or owner
Types of lead evaluation protocol(s)
Difference between inspection and risk assessment
Classification of EIBL child
Use of EIBL questionnaire
HUD and EPA notification and disclosure requirements
Health effects of lead in children and adults
Places where lead can be found
1995 HUD guidelines
EPA Title X purpose and goals
Importance of State and local regulations

Proposal to Perform Risk Assessment

General contract terms and requirements
Liability issues as they relate to risk assessment
Types of insurance relevant to risk assessment
Information about property needed to provide proposal for risk assessment

Information about property needed to determine number of samples/units
Estimating costs for lead evaluation work

Preparation for Risk Assessment

Risk assessment scheduling and staffing
OSHA regulations applicable to risk assessment
Potential job site hazards and personal protective equipment

Walkthrough

Background information about lead use and sources
Basic building construction and architecture
Conditions when lead paint is considered a hazard
Sources of lead other than paint
HUD categories of paint condition and deterioration

Conduct Sampling

Field documentation: testing location, sketches, HUD forms
Selection of dust sampling location(s)
Single surface sampling procedures
Calculation of dust concentration in $\mu\text{g}/\text{ft}^2$
EPA/HUD guidance levels for lead in dust
Spike and blank dust samples
Selection of soil sample locations
Soil sampling procedures/equipment
EPA guidance levels for lead in soil
Water sampling procedures
EPA drinking water lead standards
Selection of paint sample locations
Use of XRF analyzer and safety issues
Performance characteristics sheets (PCS)
Paint chip sample collection procedures/equipment
Laboratory methods and accreditation programs for lead
Calculation of ppm and mg/cm^2 for lead in paint

Assessing Multi-Family (MF) Dwellings

Targeted, worst-case and random sampling of MF dwellings
Elements of a management plan for MF dwellings
Interpretation of sampling results from MF dwellings

Report Preparation

Parts of the HUD standard risk assessment report
Hazard control action alternatives/costs
RCRA regulations for hazardous waste disposal

Ongoing Monitoring

Elements involved in ongoing lead hazard monitoring
Schedules for reevaluation

REFERENCES

Virginia Lead-Based Paint Activities Regulations, Code of Virginia, Title 54.1, Chapter 5. <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+TOC5401000>
HUD Guidelines, 1995 Edition with 1997 changes to Chapter 7 only. <http://www.hud.gov/offices/lead/lbp/hudguidelines/Ch07.pdf>
OSHA Federal Register Volume 58, No. 84
EPA Federal Register 40 CFR Part 745 with EPA Regulations published in the Federal Register on January 5, 2001. <http://epa.gov/superfund/lead/products/rule.pdf>