Contents

1. Purpose ......................................................................................................................... 1
2. Objectives ....................................................................................................................... 1
3. Applicability .................................................................................................................. 1
4. Definitions ...................................................................................................................... 2
5. Background .................................................................................................................... 2
6. Responsibilities ............................................................................................................. 3
   6.1. Physical Plant Housing Supervisor ............................................................................ 3
   6.2. Physical Plant Supervisor for Building Trades ......................................................... 3
   6.3. Physical Plant Building Trades Employees ............................................................... 4
   6.4. Contractors ............................................................................................................... 4
   6.5. Director of Environmental Health and Safety ............................................................ 5
7. Notifications .................................................................................................................. 5
   7.1. New Tenants in Rental Housing ............................................................................... 5
   7.2. Prior to Maintenance or Renovation Activities ....................................................... 5
   9.2. RRP Work Procedures ............................................................................................ 8
   9.2.1. Pre-Work Preparations ......................................................................................... 8
   9.2.2. Surface Preparation .............................................................................................. 8
   9.2.3. Interior Activities ................................................................................................ 8
   9.3. Exterior Activities .................................................................................................... 9
10. RRP Requirements – Holmes Hall .............................................................................. 10
11. Waste Disposal ........................................................................................................... 10
12. Recordkeeping ............................................................................................................ 10
13. Applicable Regulatory Citations .................................................................................. 11
1. Purpose

This policy is intended to provide guidance and procedures for performing surveillance, maintenance and renovation activities on College owned buildings that may have painted surfaces containing lead. This plan outlines the individual responsibilities regarding the day-to-day maintenance of lead hazards and the planned or accidental disturbance of lead based paint. The primary objective of the Lead Management Plan is to control building occupant and employee exposure to elemental lead from lead based paint. Connecticut College intends to meet or exceed the appropriate regulations regarding lead, for the health, safety and well being of the College community and the environment.

2. Objectives

This policy has been developed in accordance with the Environmental Protection Agency (EPA), The Connecticut Department of Energy and Environmental Protection (CT DEEP) and Connecticut Department of Health regulations. The primary objective of the Lead Management Plan is to control building occupant and employee exposure to lead dust, by minimizing any potential hazard posed by lead containing paint during maintenance, renovation and general operation activities in target housing and facilities (as defined below).

3. Applicability

This policy will apply to all college employees, including Building Trades, Mechanical Trades, and contractors hired by the College, and covers, rental housing, academic, residential and support buildings including off-campus housing, and storage facilities.

Residential occupancies and “Child Occupied Facilities” with children under the age of six (6) will be required to meet the more stringent regulations found in the EPA’s Renovation, Repair and Painting Rule. The RRP rule applies to anyone who works for compensation in pre-1978 housing and child-occupied facilities, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in single or multi-family housing
- Painters, plumbers and most specialty trades

The RRP rule covers renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers.
4. Definitions

**Child-Occupied Facility** - is a building, or portion of a building, constructed prior to 1978, visited by the same child, 6 years of age or under, on at least 2 different days within any week, provided that each day's visit lasts at least 3 hours, the combined weekly visit lasts at least 6 hours, and the combined annual visits last at least 60 hours. Such facilities may include, but are not limited to day-care centers, preschools and kindergarten classrooms.

**EPA** - The U.S. Environmental Protection Agency

**CDC** - The Centers for Disease Control

**HUD** - The Department of Housing and Urban Development

**RRP** – The EPA’s “Renovation, Repair and Painting” Rule

**Target Housing** - is a house or apartment (including mobile homes) built before January 1, 1978. The following are not considered Target Housing:

- 0-bedroom units (like dorm rooms or studio apartments)
- Housing that is officially designated for the elderly or the handicapped
- Housing that has been tested by a State Certified Lead Inspector and found to be free of lead-based paint.

5. Background

Lead is a naturally occurring, highly toxic soft metal that can be found in the earth’s crust. Because lead is very pliable, it was a valuable resource for manufacturers and was used for many years in building products such as pipes, rods, paints, and containers. Lead can be found in all parts of our environment due to human activities including burning fossil fuels, mining, and manufacturing. Due to health concerns, lead from paint, gasoline, ceramic products, caulking, and pipe solder has been significantly reduced in recent years. All paint has the potential to be lead-based if installed before 1978 unless testing proves otherwise. Paint containing at least 1.0 mg/cm² (by XRF), or 0.5% by weight for chip analysis is considered lead-based. However, the mere presence of lead-based paint in a building does not mean that the health of the building occupants is endangered. When lead paint is sanded or disturbed, microscopic particles of the metal mingle with the dust that is created. That "lead-containing" dust is what can seriously impact people's health, especially children and pregnant women. Lead dust is usually found on windowsills, in window wells, and near doors that rub against floors and casings. It can also be present in the soil near to the house.
because of years of peeling, flaking or scraping. Blistering and peeling paint can produce chips and flakes that can also be consumed.

Lead causes a long list of irreversible problems, including learning and behavioral problems, kidney disease, high blood pressure, miscarriage and birth defects. Lead can even cause depression and aggressive behavior. Experts say lead poisoning doubles the number of children in special education classes. Studies show it plays a major role in crime rates. Any amount of lead is bad for you. There is no safe level.

The Federal law creating the Renovation, Repair, and Painting Rule (RRP) was passed in 2008. The Rule actually went into effect on April 22, 2010 and was updated on July 15, 2011. (40 CFR 745.80, Subpart E)

The RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing or “child occupied facilities” for compensation, and who might disturb painted surfaces, to become an EPA Certified Renovator by taking a "Lead Safe Work Practices" RRP class from an EPA accredited training provider.

6. **Responsibilities**

6.1. **Physical Plant Housing Supervisor**

- At the time of signing the lease, provides information regarding known lead paint hazards to new tenants, to include summary letters, inspection reports, along with a copy of the EPA Booklet “Protect Your Family From Lead in Your Home”. Provides updated information by March 1 of each year. (See Section 7, “Notifications”.)
- Prior to any renovation/remodeling/repair activities (disturbing more than 2 feet\(^2\) of paint), provides a copy of the EPA Booklet “The Lead-Safe Certified Guide to Renovate Right.” For work in apartment building common areas, all occupants will receive the booklet and notification. A signature must be obtained from the tenant acknowledging receipt of the booklet. (See Section 7, “Notifications”.)

- Acts as liaison between the College (and contractors) and the housing occupant(s) during maintenance/renovation activities.

6.2. **Physical Plant Supervisor for Building Trades**

- Notifies the Director of EH&S of any work scheduled at any building where a child 6 years old or younger, resides or occupies for more than 3 hours per day, on at least two separate days a week. This includes the Children’s School at Holmes Hall.
- Ensure that College employees adhere to “lead-safe” practices whenever working with suspect surfaces, regardless of building type.
• Verify the lead content prior to commencing any work that might disturb lead based paint.
• Verify RRP certification of construction/abatement firms.
• Include documentation of building occupant notification of the renovation, to the Office of EH&S as part of the final report submitted by the contractor.

6.3. Physical Plant Building Trades Employees

College employees are limited to performing renovations in the following types of housing:

• Housing built in 1978 or later.
• Housing for elderly or disabled persons, unless children under 6 reside, or are expected to reside there.
• Zero-bedroom dwellings (studio apartments, dormitories, etc.).
• Housing or specific building components that have been declared lead-free by a certified inspector or risk assessor using an EPA recognized test kit or XRF Analyzer, or by collecting paint chip samples and obtaining negative test results from an EPA recognized laboratory
• Minor repair and maintenance activities that disturb 6 square feet or less of paint per room inside, or 20 square feet or less on the exterior of a home or building that has lead based paint. Note: minor repair and maintenance activities do not include window replacement and projects involving demolition or prohibited practices.

Work on College owned housing that does not meet the above criteria, will be performed by a “Certified” renovation firm (contractor), using trained employees.

Regardless of the RRP classification of the building, College employees will adhere to “Lead Safe practices.

6.4. Contractors

• RRP Contractors must provide documentation of certification/training to the Supervisor of Building Trades, before beginning work.
• Contractors hired to perform work on affected housing will follow all federal regulations and procedures regarding lead containing materials.
• Upon completion of the project, contractors must submit copies of RRP certification, employee training, lead testing and post-renovation cleaning verification to the Office of EH&S as part of the final report.
• Contractors must use all appropriate personal protective equipment (PPE). Contractors are required, when using respirators to have a Respiratory Protection Program. Documentation shall be provided to Connecticut College Physical Plant and/or Environmental Health & Safety before initiating work.
6.5. Director of Environmental Health and Safety

- Maintain required RRP documentation.
- Provides Lead Safety training to affected Connecticut College employees.
- Perform periodic inspections of lead painted surfaces in affected housing.
- Manage lead based hazardous waste.
- Monitor the overall Lead Paint Program.

7. Notifications

7.1. New Tenants in Rental Housing

Federal law requires that before signing a lease for housing built before 1978, renters must receive the following from the landlord:

- An EPA-approved information pamphlet on identifying and controlling lead-based paint hazards, “Protect Your Family From Lead In Your Home” (PDF), also available in other formats and languages.
- Any known information concerning the presence of lead-based paint or lead-based paint hazards in the home or building. For multi-unit buildings, this requirement includes records and reports concerning common areas and other units when such information was obtained as a result of a building-wide evaluation.
- An attachment to the contract, or language inserted in the contract, that includes a "Lead Warning Statement" and confirms that the seller has complied with all notification requirements.

7.2. Prior to Maintenance or Renovation Activities

Contractors and owners of rental properties must inform occupants about lead based paint before non-emergency repair; maintenance and home renovation work begins. Exception: Work surfaces less than two (2) square feet in area.

- Contractors and/or property owners must distribute copies of "The Lead-Safe Certified Guide to Renovate Right" booklet before any work is initiated.
- The contractor or property owner must have an adult occupant sign an acknowledgement form after receiving the booklet. Alternatively, the contractor or owner can send the booklet by certified mail.
- If the contractor or property owner cannot get a signed acknowledgement, the contractor or property owner must sign a statement documenting this.
- For work in common areas, such as the lobby of an apartment building, the contractor must give the booklet to the owner and to the occupants of all affected areas, and inform them of the nature, location, timing and length of job.
8. Lead Safe Work Practices

Lead safe work practices will be used for all maintenance or repair activities that have the potential to disturb lead based paint. This is the minimum standard of practice in non-target housing or child facilities (no children age 6 or younger are present).

8.1. Occupant Protection

- Occupants may not enter the worksite during Lead Hazard Reduction activities. If necessary, occupants may be temporarily relocated to a suitable unit that is decent, safe, and sanitary and free of lead-based paint hazards during Lead Hazard Reduction activity.
- Contractors and property owners must protect occupants' belongings from lead contamination by relocating, covering or sealing them, and securing the worksite against entry during non-work hours.

8.2. Worksite Preparation and Containment

- Use plastic sheeting to minimize the spread of lead dust, paint chips, soil, and debris.
- Place warning signs at each entry where Lead Hazard Reduction activities are conducted when occupants are present. The signs are required at the main and secondary entrance to a building, and at exterior worksites signs must be readable from 20 feet.

8.3. Prohibited Practices

- Power Sanders and Grinders that are not equipped with HEPA vacuum filtration cannot be used on any painted surface that has, or could contain lead paint. These machines generate a considerable amount of airborne dusts that will adversely affect the building occupants, the workforce and the environment.
- Open Flame/High Heat removal of paint using a torch or heat gun operating above 1,100°F is not permitted. Use of high heat for removal produces lead fumes that not even a HEPA respirator cartridge can filter out. It is one of the most dangerous methods of removing paint because it allows lead to rapidly enter the bloodstream when those fumes are inhaled. Use low temperature heat guns instead.
- Abrasive Blasting or Sandblasting that tends to spread chip, dust and debris beyond the work area.
- Dry Sanding or Scraping. There are 4 exceptions to this:
  1) Dry scraping in conjunction with low temperature heat guns;
  2) Dry Scraping within 1 foot of electrical outlets;
3) Treating deteriorated paint spots that total no more than 2 square feet in any one interior room or space; or
4) Treating deteriorated paint spots that total no more than 20 square feet on exterior surfaces.

- **Use of Hazardous (volatile) Paint strippers** in poorly ventilated spaces. Use of strippers that contain the cancer causing chemical Methylene Chloride is prohibited.

9. **EPA’s “Renovation, Repair and Painting” Rule**

The EPA RRP Rule Went into effect on 21 April 2010, and affects:

- **Target Housing** – “Target Housing” are homes or residential units built on or before December 31, 1977. (Except for housing for elderly or those with disabilities, unless a child 6 years old or younger, resides or is expected to reside in such facilities.)
- **Child-Occupied Facility** – A “Child-Occupied Facility” is a pre-1978 building that meets all three of the following criteria:
  1) Visited regularly by the same child, under 6 years of age.
  2) The visits are on at least two different days within any week, provided that each day’s visit lasts at least 3 hours.
  3) Combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours.

9.1. **RRP Certified Firm Requirements**

The RRP Rule requires contractors and property owners to meet additional requirements beyond lead-safe work practices:

- **Individual Certification** - At least one RRP Certified Renovator is required at each job site. Certification involves taking a 1-day class from an EPA Accredited Training Provider.
- **Firm Certification** - In addition to individual certification, each firm, and agency or non-profit must also become RRP certified. (Note: This includes city agencies and school districts as well as small "one-man-band" handymen and owners of rental property.)
- **On-the-Job-Training** - RRP Certified Renovators are required to train all non-certified people at the job site.
- **Paint Testing** - The RRP rule requires that the paint to be disturbed is tested BEFORE beginning the job, or is assumed that the paint is lead-based. This testing is to be done using EPA-approved test kits.
9.2. RRP Work Procedures

9.2.1. Pre-Work Preparations

• At least 10 days before commencing lead paint work in rental housing, Physical Plant will provide a copy of the Lead Paint Work Notification Form, and a copy of the pamphlet; “Protect Your Family From Lead in Your Home”. An adult occupant must sign receipt of the notification.
• At least 10 days before commencing work, the contractor must provide proof of training, adequate insurance, and copies of the MSDS (or SDS) for all products to be used on the project to the Building Trades Supervisor.
• Before interior work is initiated, the contractor shall have all necessary equipment and tools, including HEPA vacuums, required to mitigate dust hazards on site.
• The contractor will ensure that signs and caution tape are posted on the doors into the building:

DO NOT ENTER
NO EATING, DRINKING OR SMOKING

• The contractor will take measures to restrict access to the regulated area while work is being performed, until final clean up is done.

9.2.2. Surface Preparation

• At no time shall any work that disturbs lead based paint be performed, unless a properly trained supervisor is on site, over-seeing actual conditions and practices.
• Have all damaged areas evaluated for cause and corrective action before painting.
• Wet scrape any loose, peeling or flaking paint, or
• Use tools/equipment that are attached to HEPA vacuum system.
• Fill all holes and cracks less than 1/16” wide with non-shrinking spackle compound.
• If sanding is necessary to feather edges, a wet abrasive sponge or wet sand paper should be used.
• If an encapsulant product such as “Lead Stop”® is used, it must meet the criteria of the US Department of Housing and Urban Development or EPA.
• If cracking or alligatoring is extensive, mesh with a 2” overlap should be used before applying final coats, wallpaper, spackle and/or paint. The use of wood, sheetrock, plaster and similar material, is also permitted to repair larger holes and cracks.

9.2.3. Interior Activities
• The floor must be protected with minimum 6-mil polyethylene sheeting, at least 5 feet from the work area. It must be taped or stapled to the baseboard.
• Drapes, curtains, furniture, rugs and other similar materials must be at least 5’ from the work area, or shall be covered with plastic and taped, if not relocated.
• Food storage areas, including refrigerators, must be wrapped in plastic and taped to prevent any possible contamination.
• All tools and equipment must be on the plastic sheeting before any work is initiated.
• Before stepping off tarp or sheeting, after work has started, contractors shall verify clean shoes and properly contain equipment to prevent spread of contamination.
• If door to the room is within 5’ of work area, the contractor shall either close and seal openings from inside, or cover the opening with plastic, and seal in place.
• Connecticut College Building Trades Supervisor or the Director of Environmental Health & Safety must inspect the final cleanup before re-occupancy is permitted.

9.3. Exterior Activities

• For houses built before 1978 (unless proven not to contain lead paint) cover all of the doors and windows within 20’ of the work area with a minimum of 6mil plastic to prevent any chips or dust from entering the building.
• Protective sheeting or tarps will be spread on the ground a minimum of 10’ from the base of the house for a single story building. For each additional floor above the 1st, 5 additional feet is required. The sheeting or tarp shall be securely attached (taped or stapled) to the base of the building to prevent chips and dust from entering soil.
• All paint scraping (chips, dust, etc.) shall be collected by the contractor, properly containerized and given to Environmental Health and Safety for proper, recognized disposal. The name, address or the property must be included with the waste container.
• When using ladders on plastic sheeting, contractors are required to cut slits into the plastic to place ladder feet directly on to the ground. Holes shall be duct taped or otherwise covered when ladder is relocated.
• Ladder use shall be in compliance with OSHA rules and regulations.
• Fall protection must be incorporated into the work, if personnel working on platforms or roofs that are greater than 6’ above the next lower surface.
• Safety equipment such as eye protection is required when scraping.
• If required, contractors shall wear the appropriate NIOSH approved respirators. (If respirators are used, a Respiratory Protection Program must be in place.)
• Connecticut College Building Trades Supervisor or the Director of Environmental Health & Safety must inspect the final cleanup before re-occupancy is permitted.

10. RRP Requirements – Holmes Hall

Holmes Hall, home to the Human Development/Children’s Program, meets the definition of a Child-Occupied Facility, as it was built prior to 1974. However, most, if not all lead painted surfaces in the building, including all windows and siding have either been replaced or encapsulated. But to ensure that proper precautions are taken, the Supervisors of Building Trades and Mechanical Trades will discuss the scope of all maintenance procedures with the Director of Environmental Health & Safety before work is started. If the project or maintenance is likely to disturb lead based paint, a certified RRP contractor will be used instead.

11. Waste Disposal

• Under no circumstances shall an employee of the college or an outside contractor working for the college be permitted to drop lead paint to the ground without providing some type of barrier at or above grade.
• Lead paint debris, contaminated plastic and cleaning materials are to be managed as Hazardous Waste. Paint chips and debris shall be properly packaged on site, placed in a 4 or 6 mil plastic bags (without holes) and then turned over to the Paint Shop for placement into the Lead Paint Waste Drum, located in the Paint Shop, or into a separate drum, and stored in the Hazardous Waste Trailer.
• Physical Plant Paint Shop Personnel and the Environmental Health and Safety Office shall verify that the container is properly labeled and covered at all times, as required by law.

12. Recordkeeping

The EPA RRP rule requires that the contractor submit a final report to the College at the time that the final invoice is presented for payment, or within 30 days of the completion of the project (whichever comes first). The report should include, at a minimum:

1) Results of the test for lead-based paint
2) Documentation of the training of non-certified workers
3) Documentation of the lead-safe work practices the company used
4) Results of the cleaning verification or clearance exam

If the project was in the common area of a multi-family dwelling, or in a child-occupied facility, the final report must be made available, upon request, to any occupant or parent/guardian.
Additional information will be included in the package provided to the Director of EH&S by the Supervisor of Building for filing:

5) Documentation of RRP Firm certification  
6) Documentation of a Respiratory Protection Program (if applicable)  
7) Documentation of proper disposal of hazardous waste (i.e., copies of Hazardous Waste Manifests) (if applicable)

13. Applicable Regulatory Citations

- “Lead in Construction” (OSHA 29 CFR 1926.62)  
- “Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities” (EPA 40 CFR 745)  
- “Requirements for Hazard Education Before Renovation of Target Housing” (EPA 40 CFR Part 745)  
- “Identification of Dangerous Levels of Lead” (EPA 40 CFR 745)