1.0 PURPOSE
The purpose of the Lead Management Plan is to prevent lead exposure of all workers, regardless of job title and to help prevent the potential for building contamination from lead during demolition, maintenance, and renovation activities in Calvin College owned structures. The requirements in this program set standards for work that disturbs potential lead-containing materials. Contractors engaged in such projects are expected to possess the managerial expertise, experience and employ workers with skill, training, and experience so that the work is carried out in compliance with applicable regulations.

This document was developed to ensure Calvin College compliance with Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA) and the office of Housing and Urban Development (HUD) Standards. Many of these standards are enforced in the State of Michigan by authorized agencies such as the Michigan Occupational Health and Safety Administration (MIOSHA), the Michigan Department of Community Health (MDCH) and the Michigan Department of Environmental Quality (MDEQ).

2.0 INTRODUCTION
Lead is a soft bluish-gray metal in its elemental state that is commonly found as an additive in many construction materials. Such materials include but are not limited to; paint, welding wire, solders used for soldering tinplate and copper pipe joints, tank linings and electrical conduit. The Consumer Product Safety Commission has banned the use of lead-based paints in residences. However, because lead-based paint inhibits the rusting and corrosion of iron and steel, lead continues to be used in bridges, railways, ships, lighthouses and other steel structures. Employee exposures to lead can occur during the demolition, or salvage of structures, during the removal or encapsulation of lead-containing materials, and during new construction, alteration, repair, or renovation of structures that contain lead or lead-containing materials.

Overexposures to lead are commonly found in the construction industry, and are a significant cause of illness in the workplace. Exposure to lead can occur through inhalation (breathing), ingestion (eating), and in the case of certain organic lead compounds, absorption through the skin. Employee exposure to lead can result in both acute (short term) and chronic (long term) health effects. Such health effects include insomnia, constipation, nausea, encephalopathy or damage to the central nervous system, anemia, and kidney disease. Exposure can result in damage to the both the male and female reproductive systems (e.g., decreased fertility, sterility, impotence, miscarriage, and still birth). If an employee does not receive proper medical treatment for these conditions, and the exposures to lead continue unchecked, these health effects can become permanent, and may even result in death.
3.0 **DEFINITIONS**

**Abatement** - means any measure or set of measures designed to permanently eliminate lead-based paint hazards. Abatement includes, but is not limited to:

1. The removal of paint and dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of painted surfaces or fixtures, or the removal or permanent covering of soil, when lead-based paint hazards are present in such paint, dust or soil; and
2. All preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures.
3. Abatement does not include renovation, remodeling, landscaping or other activities, when such activities are not designed to permanently eliminate lead-based paint hazards, but, instead, are designed to repair, restore, or remodel a given structure or dwelling, even though these activities may incidentally result in a reduction or elimination of lead-based paint hazards. Furthermore, abatement does not include interim controls, operations and maintenance activities, or other measures and activities designed to temporarily, but not permanently, reduce lead-based paint hazards.

**Action Level (AL)** – Employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30ug/m³) calculated as an 8-hour time-weighted average.

**Certified Firm** means a company, partnership, corporation, sole proprietorship, association, or other business entity that performs lead-based paint activities to which EPA has issued a certificate of approval pursuant to §745.226(f).

**Certified Inspector** means an individual who has been trained by an accredited training program and certified by the MDCH to conduct inspections and take samples for the presence of lead in paint, dust, and soil for the purpose of abatement clearance testing.

**Certified Renovator** means an individual who has successfully completed an eight-hour renovator course accredited by an EPA certified trainer.

**Certified Risk Assessor** means an individual who has been trained by an accredited training program and certified by the MDCH to conduct inspections and risk assessments and to take samples for the presence of lead in paint, dust, and soil for the purpose of abatement clearance testing.

**Certified Supervisor** means an individual who has been trained by an accredited training program and certified by the MDCH to supervise and conduct abatements and to prepare occupant protection plans and abatement reports.

**Child Occupied Facility** – a building or portion of a building constructed before 1978 that is visited regularly by a child who is 6 years of age or less, on at least 2 different days within a given week, if each
day’s visit is at least 3 hours and the combined weekly visit is at least 6 hours in length, and the combined annual visits are at least 60 hours in length. Child occupied facility includes but is not limited to a day-care center, a preschool, and a kindergarten classroom.

**Cleaning Verification Card** means a card developed and distributed or otherwise approved, by EPA for the purpose of determining, through comparison of wet and dry disposable cleaning cloths with the card, whether post-renovation cleaning has been properly completed in RRP settings.

**Common Area** means a portion of the building this is generally accessible to all occupants of the building. Common areas includes, but is not limited to, a hallway, a stairway, a laundry and recreational room, a playground, a community center, a garage, and a boundary fence.

**Construction** means work for construction, alteration and/or repair, including painting and decorating. It includes but is not limited to the following:
1. Demolition or salvage of structures where lead or materials containing lead are present;
2. Removal or encapsulation of materials containing lead;
3. New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
4. Maintenance operations associated with the construction activities described in this paragraph.

**Contractor Employer Program** – In accordance with the Hazard Communications Standard, each outside contractor working on a Calvin College owned property (on-site) is responsible for developing, implementing, and informing other on-site employers of all hazard communication related information. Under the Program, each outside employer must provide Calvin College, and other employer(s) working on-site, with unrestricted, on-site access to material safety data sheets (MSDSs) for all hazardous materials used, handled or stored on-site to which an employee may potentially be exposed to during their normal course of work.

**Dormitory Room** – A zero bedroom unit for housing students.

**Elevated Blood Level or EBL** means for purpose of lead abatement, an excessive absorption of lead that is a confirmed concentration of lead in whole blood of 20ug/dL (micrograms of lead per deciliter of whole blood), for a single venous test or of 15-19 ug/dL in two consecutive tests taken 3 to 4 months apart. For purposes of case management of children 6 years of age or less, elevated blood level means an excessive absorption of lead that is a confirmed concentration of lead in whole blood of 10 ug/dL.

**Hazardous Waste** – Generation and disposal of hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA). If a waste exhibits toxicity, corrosivity, ignitability, or reactivity characteristics it is considered hazardous.
HEPA – A high-efficiency particulate air (HEPA) filter is one that is capable of filtering 99.97% of all airborne particles at 0.3 micrometers (μm) in diameter.

HEPA Vacuum Cleaner means a vacuum cleaner that has been designed with a HEPA filter as the last filtration stage. The vacuum cleaner must be designed so that all the air drawn into the machine is expelled through the HEPA filter with none of the air leaking past it.

Inspection means a surface-by-surface investigation to determine the presence of lead-based paint in target housing or child occupied facility, and the provision of a report explaining the results of the investigation.

Lead means metallic lead, all inorganic lead compounds, and all organic lead soaps. Excluded from this definition are all other organic lead compounds.

Lead-Based Paint means paint or other surface coatings that contain lead equal to or in excess of 1.0 milligrams per square centimeter (mg/cm²), 0.5 percent by weight, or 5,000 micrograms per grams (μg/g).

Lead-Based Paint Activities means, in this case of target housing and child-occupied facilities, inspection, risk assessment, and abatement, as defined in 40 CFR §745.

Lead Containing Material (LCM) – Any material that has been confirmed, through laboratory analysis to contain any detectable quantity of lead.

Micrograms per cubic meter (µg/m³): a measurement of particles in a volume of air used for determining the amount of exposure to lead.

Micrograms per deciliter (µg/dl): a measurement of particles in a volume of liquid used for determining blood lead levels in a person.

Permissible Exposure Limit (PEL) – No employee shall be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 µg/m³) averaged over an 8-hour period or for a total of 400 µg/m³ in any workday.

Presumed Lead Containing Material (PLCM) – Any material that is presumed to contain any quantity of lead.

Renovation means the modification of any existing structure, or portion thereof, that results in the disturbance of painted surfaces, unless that activity is performed as part of an abatement as defined by 40 CFR 745.223. The components (e.g., modification of painted doors, surface restoration, window repair, surface preparation activity components (e.g., walls, ceilings, plumbing, windows); weatherization projects
(e.g., cutting holes in painted surfaces to install blown-in insulation or to gain access to attics, planning thresholds to install weather-stripping), and interim controls that disturb painted surfaces.

**Representative Sample** – Sample that accurately captures a particular material or area based on the typical characteristics of that material or area.

**Risk Assessment** means an on-site investigation in target housing or a child occupied facility to determine the existence, nature, severity, and location of a lead-based paint hazard AND the provision of a report by the person conducting the risk assessment explaining the results of the investigation and options for reducing the lead-based paint hazard.

**Substrate** – The underlying material a building component is made from, over which is often applied a surface finish such as paint. Common substrates include, plaster, concrete, wood, metal, and gypsum.

**Target Housing** - Any housing constructed before 1978, except any of the following:
   (a) Housing for the elderly or persons with disabilities, unless any 1 or more children age 6 years or less resides or is expected to reside inside that housing.
   (b) A zero-bedroom dwelling
   (c) An occupied dwelling unit pending demolition, provided the dwelling unit remains unoccupied until demolition.

**Toxicity Characteristic Leachate Procedure (TCLP)** – Test conducted to determine if a substance is a hazardous waste. The hazardous waste limit for lead is 5 parts per million (ppm). This limit applies only to waste determination.

**Wet Disposable Cleaning Cloth** means a commercially available, pre-moistened white disposable cloth designed to be used for cleaning hard surfaces such as uncarpeted floors or counter tops.

**Wet Mopping System** means a device with the following characteristics: A long handle, a mop head designed to be used with disposable absorbent cleaning pads, a reservoir for cleaning solution, and a built-in mechanism for disturbing or spraying the cleaning solution onto a floor, or a method of equivalent efficacy.

**Work Area** means the area that the certified renovator establishes to contain the dust and debris generated by a renovation.

**Zero-Bedroom Dwelling** means any residential dwelling in which the living area is not separated from the sleeping area. The term includes efficiencies, studio apartments, dormitory housing, military barracks, and rentals of individual rooms in residential dwellings.

## 4.0 RESPONSIBILITIES
• Med-1
  ○ Provide medical consultations and examinations for workers & students who have been overexposed or believe they may have been overexposed to lead.
  ○ Maintain medical records relating to consultations, examinations and medical surveillance.

• Contractors
  ○ Review lead hazards and scope of work, including Appendix A (Project Assessment & Authorization), with the appropriate Assistant Director and/or EHS before work commencement.
  ○ If doing abatement work, the contractor must be RRP certified & provide the EPA’s Renovate Right pamphlet to tenants/renters.
  ○ Inform EHS of any monitoring results.

• Environmental Health and Safety
  ○ Review the lead plan annually and revise as needed.
  ○ Coordinate RRP certification training as needed for impacted staff.
  ○ Coordinate lead inspections and air monitoring as needed.
  ○ Maintain documents such as training records, lead paint analyses, air monitoring, medical records, and abatement history.
  ○ Ensure renters/tenants receive the proper EPA pamphlets and lead-based paint acknowledgement form.

• Physical Plant Assistant Directors
  ○ Support the Lead Management Plan and ensure employee compliance.
  ○ Work with EHS to complete an Assessment & Authorization form before projects involving lead-based paint begin. This form is available under the asbestos plan or from EHS.
  ○ Ensure that employees are informed, trained, and provided with the appropriate lead protection systems and PPE.

• All Employees
  ○ Comply with the lead policy and any further safety procedures and recommendations provided by the supervisor or EHS regarding lead exposure issues.
  ○ Report any unsafe or unhealthy work conditions and lead related injuries or illness to the supervisor or EHS immediately. These include but are not limited to:
    • Positive blood lead results
    • Crumbling paint
    • Physical injuries around lead dust
    • Paint ingestion
    • Lead exposure symptoms
  ○ Use good housekeeping such as keeping a clean work place.
  ○ Practice good hygiene by washing hands before lunch break and at the end of the workday.
  ○ Ask EHS any questions related to lead safety.

• Renters/Tenants
  ○ Report to your Calvin contact or the EHS department crumbling paint or suspected areas where lead exposure may occur. Do not mop, vacuum, or in any way clean crumbling paint chips.
  ○ Avoid rooms with crumbling paint. Keep children out of the room or area until the Calvin Physical Plant is able to coordinate abatement or stabilization of the paint.
• Stay out of designated areas while abatement is underway.
• Off-campus renters/tenants must review EPA’s Protect Your Family From Lead In Your Home pamphlet.
• Off-campus renters/tenants must review EPA’s Renovate Right pamphlet if renovations and/or repair work will take place in the home.
• Tell your doctor and your children’s doctor of the possibility of lead exposure. Follow your doctor’s advice on how to minimize risk and testing lead levels.

• College Employees
  • Contact the EHS Department to have a suspect lead-containing material tested.
  • Attend appropriate initial and refresher awareness trainings as directed by EHS.

• Supervisors, Deans, Directors, Chairs
  • Ensure that information and procedures contained within this Lead Management Plan are strictly followed by all personnel.
  • Notify EHS when new employees are hired so they may be properly trained, if necessary.
  • Contact EHS for testing of suspect materials encountered during routine operations.
  • Contact EHS if any renovation activities are to take place in target housing for RRP compliance assistance.
  • Report any problems associated with the Lead Management Program to EHS.

• Contractors
  • Coordinate with a Calvin Assistant Director of Plant when renovations and demolitions are planned to obtain existing lead surveys and do determine what level of project design and specification documents may be required.
  • Provide Calvin Assistant Director with a copy of any lead survey and/or project specification information for lead related activities as they are obtained.
  • Ensure the standard lead notification is included in any project specification or contract.
  • Notify EHS a minimum of 15 working days in advance of upcoming project that may impact coated surfaces that may contain lead. Work with EHS and Calvin Assistant Director to determine if RRP rules apply to project.
  • Disclose known information regarding the presence of lead in building and/or construction materials to contractor retained to conduct work at Calvin College.
  • Utilize only EPA licensed RRP contractors for disturbances of lead containing materials in target housing or child occupied facilities.
  • Stop or modify lead related work practices if employees, students, or the public are being exposed to lead hazards.
  • Ensure all hazardous waste is properly identified, labeled, segregated, and stored at the job-site until removed by EHS or approved contractor.

• External Project Managers, General Contractors, Sub-Contractors, and Lead Specific Contractors:
  • Maintain company specific Lead Management Plan and comply with all applicable regulations.
  • Conduct initial assessments of employee’s potential for lead exposure as required by MIOSHA Part 603.
  • Ensure that all impacted employees have received lead awareness training including information required by MIOSHA Part 603.
Do not disturb any lead-containing material unless specifically authorized to do so.
- Communicate hazards related to lead work to all other trades on the project site and to EHS.
- Ensure that Calvin College employees are not exposed to lead levels above the OSHA action level through use of enclosures and/or air monitoring.
- Contact EHS through Calvin College Project Manager if any renovation activities are to take place in target housing or child occupied facilities for RRP compliance assistance.
- Prevent the contamination of Calvin College property (i.e., computers, chairs, desks, carpet, floors, walls, etc.) from lead dust and debris.
- Ensure that workers contaminated with lead containing dust and debris do not transfer that material outside the worksite.

- EHS
  - Provide technical guidance to college personnel concerning lead hazard evaluation and control.
  - Investigate lead concerns of students, faculty, staff, contactors, building occupants, and visitors.
  - Review results of area air monitoring and clearance dust wipe sampling and provide interpretation for departments managing work.
  - Periodically monitor activities at work sites for compliance to applicable lead regulations.
  - Maintain records of all sampling data conducted.
  - Provide Lead Training in accordance with 29 CFR 1926.62 (L)(2) for college employees anticipated to have occupational lead exposure.
  - Develop and maintain a database of known lead containing materials in campus buildings, based on information provided by Departments conducting lead samplings.

5.0 LEAD COMPLIANCE AND OPERATIONS

The regulation of lead is unique in that several different agencies regulate activities that occur at the college through an even greater number of rules. For example, MIOSHA regulates worker exposure to lead in general industry and construction settings, the EPA regulates any activity that impacts lead-based paint in target housing or child occupied facilities, and the MDCH enforces the EPA regulated Lead Based Paint Activities such as inspection, abatement, and control of lead.

At any time, any, some, or all of these sets of overlapping regulations may apply to work at any Calvin College owned property and are incorporated by reference in to this program. It is the responsibility of the contractor or Calvin College Plant Assistant Director to understand where and when what regulations must be followed.

Applicable Regulations

The Calvin College Lead Management Plan has been established to comply with the following regulations:
- Lead Exposure in Construction: MIOSHA Part 603 and 29 CFR 1926.62
- Lead-based Paint Poisoning Prevention in Certain Residential Structures, including:
o EPA Renovation, Repair, and Painting (RRP) Rules: 40 CFR 745, Subpart E
o Disclosure of Known Lead-Based Paint and/or Lead-Based Pain Hazard upon Sale or Lease of Residential Property: 40 CFR 745 Subpart F
o Lead-Based Paint Activities: 40 CFR 745 Subpart L
-fl National Primary Drinking Water Regulations: 40 CFR Part 141
-fl Lead Abatement Act: Michigan Part 54A
-fl Lead Hazard Control Rules: MDCH Rule 325

The plan also includes information from the following reference materials:

- EPA Lead Information Pamphlet for Pre-Renovation Education and RRP Compliance: Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools
- EPA Small Entity Compliance Guide to Renovate Right
- MIOSHA Lead Exposure in Construction Fact Sheet
- OSHA Lead in Construction: OSHA 3142-09R
- OSHA Appendix A – Substance Data Sheet for Occupational Exposure to Lead: General Industry Construction Industry
- OSHA Appendix B – Employee Standard Summary: General Industry Construction Industry
- OSHA Compliance Directive: Lead Exposure in Construction: CPL 02-02-058
- EPA Guidance: "Regulatory Status of Waste Generated by Contractors and Residents from Lead-Based Paint Activities Conducted in Households" (August 2000)
- FDA – Ornamental and decorative ceramic ware: 21 CFR 109.16
- EDA – Pottery (Ceramics); Import and Domestic – Lead Contamination: CPG Sec. 545.450

6.0 LEAD IDENTIFICATION

Because of its physical properties, lead has been widely used as an additive to many building materials. Although lead has been banned from use on potable water supplies and residential paint, it may still be present in older buildings. Some lead containing building materials continue to be used to this day. The following materials should be presumed to contain lead unless manufacturer information, MSDS, or testing proves otherwise.

Presumed Lead Containing Materials (PLCM):
- Interior and exterior paint
- Steel and iron primer
- Industrial paint
- Industrial electrical jacketing
- Roof flashing
- Tank linings
• Soft solder
• Glazed Ceramics
• Sheeting, blocks, and bricks in floors and walls for radiation penetration protection

The OSHA Lead Standard applies to any detectable concentration of lead in a material. The presence of any lead in a material triggers the worker protection and work practice requirements of this program. Due to the fact that no limit exists for lead in paint and the average age of construction on campus, all coated surfaces at the college are assumed to contain some amount of lead.

The Calvin Physical Plant may decide to conduct lead identification sampling to determine if a presumed lead containing material contains lead. The only method currently recognized for OSHA purposes is bulk sampling laboratory analysis.

Sampling may only be conducted by a qualified consulting firm.

At a minimum, a qualified person conducting lead identification sampling will:
• Have previous bulk sampling for lab analysis experience,
• Have working understanding of the National Institutes for Occupational Safety and Health (NIOSH) sampling methodologies.
• Capable of determining appropriate sampling methodologies documenting and submitting a “representative” sampling plan.

At a minimum, Lead Identification Sampling must provide the following:
• Sampling must be representative of the material selected. One sample is needed for each homogenous (same color and substrate) component and each individual component must be sampled separately. For example, if a door is painted 2 different colors, a sample is needed for each color, or if a wall is half plaster and half drywall, a sample is needed for each substrate.
• A collection of all paint layers from a substrate, and minimize the collection of actual substrate.
• A record of the component, substrate, color, and location for each sample taken.
• Sampling results must be provided to EHS.

7.0 TRAINING

OSHA
Lead awareness training shall be conducted annually by EHS and will include the following:
• The specific nature of the operations which could result in exposure to lead above the action level
• The purpose, proper selection, fitting, use and limitations of respirators
• The purpose and description of the medical surveillance and medical removal programs, including health effects of lead exposure and potential reproductive consequences
• The contents of this compliance plan.
• Instruction that chelating agents should not be used unless under the direction of a licensed physician.
• Explanation of engineering controls and work practices for lead-related work.
• The employee’s right of access to records.

**EPA RRP**
Any Calvin College employee supervising and/or performing work under the EPA Renovation, Repair, and Painting Rules must receive eight hour Certified Renovator training. Certified Renovator training must be provided by an EPA licensed RRP training provider. The certified renovator training is valid for 3 years from the date of the initial or most recent refresher training.

An employee performing work under the EPA Renovation, Repair, and Painting Rules and who is supervised by a certified renovator may conduct the work with on-site hands on training.

### 8.0 EXPOSURE ASSESSMENTS AND MONITORING

**Air Monitoring for Lead**
EHS will coordinate air sampling for all tasks involving lead containing materials or presume lead containing materials, in which abrasive blasting is conducted, large scale demolition takes place, or HEPA equipped ventilation is exhausted outside the work-site. Sampling may only be conducted by a qualified individual(s). At a minimum, a qualified person conducting air sampling will:

• Have previous air sampling experience and work under the supervision of an Industrial Hygiene Professional
• Possess the ability to calibrate and maintain all air sampling equipment
• Have an understanding of the National Institutes for Occupational Safety and Health (NIOSH) sampling methodologies.
• Have the ability to answer questions on sampling procedures, laboratory results, and or, instrument, readings.

At a minimum, Air Sampling must provide the following:
• A personal breathing zone sample of a worker performing the lead removal operations.
• One air sample which represents an area outside the worksite, no more that 3 feet from the entrance.
• One air sample at the termination of any mechanical ventilation device used in the work-site which is exhausted outside of the worksite.
• One sample that represents the closest occupied area, or adjacent public space.
• Area air sampling must be conducted for every shift HEPA equipped ventilation is used or abrasive blasting is conducted.
• Analytical results of air samples must be provided by an American Industrial Hygiene Association accredited lab within 24 hours of sample collection.
• Air sample results must be provided to EHS daily. EHS will review all air sample results and contact the department managing the work as soon as possible and no later than the next
business day if results are at of above 30 μg/m³. The results must contain the date, time, duration, associated room number, and a floor plan drawing the identifies sample location.

An area air sample result at, or above 30 μg/m³, for any shift, will be considered a breach in dust containment. All surfaces represented in the area sample are considered to be contaminated with lead dust and represent an exposure potential for future or existing building occupants. Work must be stopped immediately and the following must occur:

- The affected area must be HEPA vacuumed, removing all visible dust from all affected surfaces.
- Clearance Dust Sampling must be conducted to ensure lead dust was removed. A re-clean of the area will be required until the University Clearance Criteria is met. Information on Clearance Dust Sampling is provided below.

**Final Clearance Sampling**

EHS will coordinate Clearance Dust Wipe Sampling at the completion of the Level 2 and 3 tasks in which more than 2 square feet of a lead containing material is impacted. Results of the sampling will determine if the worksite is free of lead dust contamination and if the worksite can be opened for unrestricted access. Sampling will also provide confirmation that an area that was accidently contaminated was sufficiently cleaned. Sampling may only be conducted by qualified individual(s).

At a minimum, a qualified person conducting clearance sampling will:

- Have previous sampling experience and work under the supervision of an Industrial Hygiene Professional
- Have the ability to answer questions on sampling procedures and laboratory results.
- Be completely independent of the contractor conducting the lead work.

For EPA RRP work, clearance samples may only be collected by MDCH licensed inspector or risk assessor for MDCH abatement activities, only a MDCH licensed inspector or risk assessor may collect clearance samples.

At a minimum, Clearance Dust Wipe Sampling must provide the following:

- One representative floor dust wipe sample per room, or per every 1000 square foot of floor space for rooms over 1000 square foot in size. Sample locations will represent the areas that have the highest potential for contamination within the work site, or areas that have been identified as contaminated.
- One dust wipe sample for every hand contact surface located in the work site, or hand contact surfaces that have been identified as contaminated.
- Clearance dust wipe samples shall be collected no sooner than one hour from the completion of work. Samples collected within an hour of the completion of work will not be considered accurate representation of actual conditions in the work area.
- Clearance dust wipe sampling shall be conducted after the worksite is HEPA vacuumed by the Contractor and all visible dust is removed and prior to use or occupancy.
• Analytical results of dust wipe samples must be provided by an American Industrial Hygiene Association accredited lab.
• Clearance dust wipe sample results must be provided to EHS for review. EHS will notify the College department managing the work the next business day if area results meets the Clearance Criteria, and or, the space can be released for unrestricted access. College Clearance Criteria is listed below.

<table>
<thead>
<tr>
<th>Surface</th>
<th>Clearance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>All interior surfaces (e.g., floors, stair treads, window sills)</td>
<td>100 ug/ft²</td>
</tr>
<tr>
<td>All exterior horizontal surfaces extending 20-feet from work-site up to a height of 6-feet (e.g., stairs, pavement, concrete, window sills)</td>
<td>400 ug/ft²</td>
</tr>
</tbody>
</table>

The Physical Plant or contractor conducting lead work on campus shall be responsible for returning the work area to below the appropriate clearance level. In settings were baseline samples show existing lead concentrations above the clearance level, the contractor must clean the work area to the baseline level or below. If baseline data is used as clearance criteria, the Physical Plant or contractor must contact EHS BEFORE work is conducted to request baseline wipe sampling and for authorization from EHS. Failure to contact EHS before work is started will require use of the listed clearance limits.

Clearance dust wipe sample results above the Clearance Criteria represent surface lead contamination. Any areas that contain surface contamination must remain a restricted lead worksite, until a re-clean is completed and clearance dust wipes are collected by a third-party Sampling Technician and results reviewed for approval by EHS.

**Note:** Clearance Criteria for lead contamination is “Target Housing” or Child-Occupied Facilities must meet requirements listed in the US Department of Housing and Urban Development (HUD), “Guidelines for the Control of Lead-Based Paint Hazards in Housing.”

### 9.0 RECORDKEEPING
Specific records must be kept regarding lead related activities, including but not limited to:

1. Training records, including employee name, employee ID number, job title, name or training, date(s) or training, and instructor name shall be maintained by the EHS for 3 years.
2. Exposure monitoring records including employee name, employee ID number, job title, task, results of monitoring, testing protocol, and date of testing shall be maintained by EHS for 30 years.
3. Medical records are kept on file by EHS in accordance with 29 CFR 1910.20.
4. Acknowledgement of lead disclosure by leasees of pre-1978 target housing at the college will be maintained by EHS for 3 years.
5. Acknowledgement of receipt of EPA pamphlet titled “Protect Your Family from Lead in Your Home” by tenants at lease signing for target housing built before 1978 will be maintained by EHS for 3 years.

6. Signed manifests returned from the lead disposal facilities shall be maintained by EHS if the waste is categorized as hazardous.

7. Other records or information as required by this management plan or existing regulations shall be maintained by EHS necessary.

10.0 NOTIFICATIONS AND COMMUNICATIONS

Lead Notification to College Housing Residents

Occupants of target housing must be provided the following:

1. Disclosure of the assumed presence of lead in all paint in housing built before 1978.

2. EPA pamphlet titled "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools"

3. If any work is conducted under RRP or MDCH rules in occupied housing, tenants/owners must be provided a copy of the EPA pamphlet referenced above within 60 days prior to the renovation.

Lead Work Notification to Building Occupants

Prior to the initiation of any interior or exterior work involving lead containing or presumed lead containing material, the Physical Plant will forward an informational memo to all appropriate persons in the building indicating that lead work will be conducted. This memo will contain the general scope of work to be done, dates for the start and proposed completion of the work, and the precautions which will be employed to protect building occupants.

When any contractor or Physical Plant will be conducting lead work under OSHA regulations they shall post warning signs outside any entrance to the worksite in accordance with 1926.62(m)(2)(i).

The contractor or Physical Plant shall post the following warning signs in each work area where an employee’s exposure to lead is above the PEL.
Additionally all lead work areas, regardless of airborne lead concentration, shall post the following information on a sign.

![Sign](image)

A sign is also required when conducting RRP work. Both signs posted above satisfy the RRP requirements when correctly used for compliance with OSHA standards. The contractor and/or Physical Plant Assistant Director shall ensure that signs are posted and maintained appropriately.

11.0 MEDICAL SURVAILANCE
Respirators are required for those working in areas of lead disturbance. A medical clearance is required from Med-1 before EHS can complete the fit test.

Employees, students, or staff that have symptoms related to lead over-exposure or were involved in an incident that allowed for the possibility of over-exposure to lead will be assessed by Med-1 for confirmation and direction for treatment.

Employees who have lead exposures will be included in a medical surveillance program which consists of blood-lead testing and further training.
APPENDIX A: PROJECT ASSESSMENT & AUTHORIZATION

Work Order Number: _______________  Physical Plant Supervisor: ____________________________
Requested date of project completion: ___________  Expected start date: _________________
Building/Room Number(s) ____________________________  Account#: ________________________

ASSISTANT DIRECTOR DESIGN or SERVICES COORDINATOR or EHOS OFFICER:

NOTE: Check Asbestos or Lead Survey Results binder for ACM information

Are asbestos, mold, or lead containing materials present in the work area?

<table>
<thead>
<tr>
<th>Material</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mold</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Does the type or location of work have the potential to disturb ACM, PACM, or mold?

<table>
<thead>
<tr>
<th>Material</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mold</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PHYSICAL PLANT ASSISTANT DIRECTOR, MAINTENANCE/ARCHITECTURAL:

Is ACM/PCM, PB, or mold disturbance expected?

<table>
<thead>
<tr>
<th>Material</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Mold</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If ACM/PACM, PB, or mold is present but it is anticipated that it will not be disturbed, state precautionary measures that will be used or reasons that ACM/PACM or PB disturbance is unlikely:

__________________________________________________________________________

If ACM/PACM disturbance is probable, which materials are likely to be disturbed? (Circle all that apply)

- Drywall
- All Types of Ceiling Tile
- Spray on Decorative Material
- Plaster
- Floor Tile and Mastic
- Linoleum
- Spray-on Fire Proofing
- Spray-on Acoustical
- Fire Doors
- Thermal System Insulation (TSI)
- Other Materials Specify:

If PB disturbance is probable, which materials and in what way are they likely to be disturbed?

__________________________________________________________________________

If mold disturbance is probable write what type if known?

__________________________________________________________________________

Lead Management Plan
Page 16 of 17
Forward form to Environmental Health and Safety Office (EHS) as soon as possible before the project starts. Remember that it could take a week to schedule the inspection and 10 days before asbestos material can be removed.

ENVIRONMENTAL HEALTH AND OCCUPATIONAL SAFETY:
Comments from EHS:

ENVIRONMENTAL HEALTH AND OCCUPATIONAL SAFETY:

EHS Officer Signature  Date