

# Warrenton-Hammond School District

## Indoor Air Quality

### Lead Based Paint Mitigation Plan

### *Repair and Renovation Procedures*

*This plan meets the IAQ Management plan submission requirement of LEED EB:O+M v2009 IEQc1.5 IAQ Best Management Practices- Indoor Air Quality Management for Facility Additions and Alterations. The contents of this plan, including but not limited to the plan scope, goals, responsible party, procedures and strategies, and quality assurance processes will vary by project based on the building's circumstances.*

#### **Indoor Air Quality Management Plan for Warrenton-Hammond School District Facilities**

Effective date: October 1, 2016

#### **i. Scope**

This plan applies to any facility alterations and additions that occur in the building that could have adverse effects on air quality, including any major alterations or additions such as a tenant improvement, or even smaller alterations/maintenance that involves using materials that emit VOCs or could release particles into the air.

#### **ii. Goals**

This plan will be fully implemented for any facility alterations or additions falling under the project scope.

#### **iii. Roles and Responsibilities**

The primary responsible party for this plan is Maintenance Supervisor. He is responsible for ensuring that this plan is executed and that any contracted vendors involved in facility maintenance and renovation activities are informed of and adhere to the procedures outlined in this plan. He is responsible for reviewing this plan for any significant changes on the interval specified in the quality assurance section. If at any time updates are required to this plan, he will ensure that the appropriate individuals are informed of the updates.

#### **iv. Procedures and Strategies**

The following Best Management Practices for indoor air quality control will be implemented as applicable for maintenance and renovations that occur in the project and for maintenance activities requiring material installation/repair lasting longer than one hour. The Property Manager is ultimately responsible for ensuring that these control measures are implemented:

#### **HVAC PROTECTION:**

HVAC systems serving the affected area will not be used during construction and all duct equipment openings will be sealed with plastic. In the event that the HVAC systems must be operated, the return side of the systems will be protected (or closed off if possible). Alternatively, temporary filters over the

return air openings will be used (MERV 8 or better). All filtration media will be replaced immediately prior to occupancy.

#### SOURCE CONTROL

Low-VOC and low-emitting materials will be used as much as possible, particularly for paints, carpet, composite wood, adhesives, and sealants that have the potential for significant emissions. All containers for paints, adhesives and sealants will be stored in a separate, secure location at times when construction is not active. During construction, lids on all containers will be kept closed.

#### PATHWAY INTERRUPTION

Construction areas will be isolated to prevent contaminating non-construction areas. This will be done by sealing off the work areas with plastic and de-pressurizing the construction area. As much as possible, with weather permitting, the construction area will be ventilated using 100% outside air to exhaust contaminated air directly to the outside. Dust guards and collectors will be used on saws, sanders, and other tools.

#### HOUSEKEEPING

All porous or absorptive building materials, such as dry wall and ceiling tiles, will be protected from exposure to moisture and will be stored in a separate, clean area prior to installation. The entrances to the construction area will have temporary walk-off mats to collect particulates. The construction area will be sealed off using plastic. During construction, daily housekeeping will include use of vacuum cleaners with high-efficiency particulate filters, and sweeping compounds or wetting agents for dust control when sweeping. Prior to building material installation, the installation area will be cleaned to remove dust and debris. Prior to occupancy, the construction area will be vacuumed using high efficiency particulate filters.

#### SCHEDULING

As much as possible, paints, sealants, and adhesives will be used after normal working hours to prevent building occupant exposure to off-gassing. All absorptive-finish materials will be installed after wet-applied materials have cured. The construction schedule will include time for a building flush out prior to occupancy. See below for flush out details.

#### FLUSH OUT

The flush out will begin after all construction work, including punch-list items, has been completed and furniture and fixtures have been installed. Finalize all cleaning, complete the final testing and balancing of HVAC systems, and make sure the HVAC control is functional. Install new filtration media and supply a total outside air volume of 14,000 cubic feet per square foot of floor area to the space while maintaining an internal temperature of at least 60 degrees Fahrenheit and a relative humidity of no more than 60% where cooling mechanisms are operated.

The area will not be occupied until after at least 3,500 cubic feet of outdoor air per square foot has been provided to the space and the space has been ventilated at a minimum rate of 0.30 cfm per square foot of outdoor air or the design minimum outside air rate (whichever is greater) for at least 3 hours prior to occupancy until the total of 14,000 cubic feet per square foot of outdoor air has been delivered to the space. The flush-out may continue during occupancy.

Upon the completion of construction, HVAC and lighting systems must be returned to the designed or modified sequence of operations.

#### **v. Quality Assurance/Quality Control Processes**

During renovations, the responsible party, will oversee the work on the construction site to ensure that the procedures are being followed as required. In addition, all maintenance personnel responsible for building repairs will review this plan annually to ensure that they implement the Indoor Air Quality practices outlined in this plan.