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To: Agency Facility Managers

 Agency Maintenance Supervisors

 DFD Project Managers

 DFD Construction Coordinators and Construction Representatives

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 Division of Facilities Development (DFD)

Subject: Guidelines for Lead (Pb) Bearing Surfaces in State Buildings

The Division of Facilities Development (DFD) has prepared this information to provide agency facility managers and DFD project managers an understanding of when regulations regarding Lead Based Paint (LBP) and lead bearing surfaces affect State owned facilities. Please contact Dan Day (608) 266-1297 or daniel.day@wisconsin.gov or Brett Jungen (608) 267-7993 or brett.jungen@wisconsin.govwith further questions.

**LEAD (Pb) BEARING SURFACES IN STATE OWNED FACILITIES**

Elemental lead (Pb) has been used since ancient times in art, plumbing, paint pigments, ammunition, ceramic glass, and leaded gasoline. The primary sources of lead today include soil, painted surfaces of water towers, bridges, and homes built before 1978. Lead can cause a range of health problems when ingested or inhaled, particularly in children and pregnant women. Some of the health effects include increased hearing problems, slow growth, nerve damage, kidney damage, mental retardation, coma, convulsions and even death in extreme cases. Although the use of lead in paint, gasoline additives, solder, pipes and other uses has been significantly reduced, installed products or residuals from their use are present in many State of Wisconsin properties. The most common location is probably lead painted surfaces, particularly in buildings or equipment constructed prior to 1980.

Renovation and demolition projects involving lead bearing surfaces do not typically require special handling of the waste if lead bearing surfaces are not separated from the substrate. Building components coated with LBP can typically be disposed of as construction and demolition (C&D) waste. However, if a lead bearing paint or surface coating is separated from the substrate, the work may generate a hazardous waste.

Article 5 of the General Requirements of the DFD construction documents identify applicable OSHA standards regarding lead. All renovation/demolition contractors are responsible for compliance with applicable OSHA standards.

Article 32 of the General Requirements of the DFD construction documents identifies cleaning and waste disposal requirements at construction sites. The demolition/renovation contractor is responsible for disposing of waste in accordance with all applicable laws, regulations, codes, rules, and standards. DOA maintains a contract for hazardous waste management and disposal services for disposal of materials that meet the definition of a hazardous waste (Wis. Admin. Code NR 600). The renovation/demolition contractor is responsible for coordinating hazardous waste characterization and disposal through the DFD Project Representative. Charges for transport and disposal of hazardous waste under the State procurement’s hazardous waste service contract will be paid directly by the State from project funds.

In addition to waste generated by a renovation/demolition contractor, hazardous waste may also be generated by the agency resulting from routine building maintenance activities. In either case, the party responsible for generating the waste has “cradle to grave responsibility” and is responsible for its proper containment and management at the worksite and is also responsible for its proper disposal.

# RULES AND REGULATIONS GOVERNING LEAD IN STATE OWNED FACILITIES

Several state and federal agencies regulate work practices, training, and disposal resulting from the disturbance of lead bearing surfaces in State owned properties.

***Federal Agencies:***

**Environmental Protection Agency (EPA)** - The EPA is charged with protecting the environment and has specific rules relating to lead. These include training for renovation or abatement of pre-1978 single family or multi-family housing and child occupied facilities, work practice controls, and proper waste handling and disposal procedures. In Wisconsin, the Department of Health Services (DHS) is the EPA-authorized agency that enforces training, certification and work practice rules. The Wisconsin Department of Natural Resources (DNR) adopts and enforces the waste handling and emissions regulations.

**Occupational Safety and Health Administration (OSHA**) - OSHA is responsible for worker protection and has a specific standard for lead in construction (1926.62) (incorporated by reference into the Wisconsin Department of Safety and Professional Services SPS 332 Code). OSHA’s primary concern under this standard is employee exposure to lead while conducting construction activities. It does not establish or define a level or percentage at which a surface is considered lead bearing. Most requirements under this standard, such as training, the use of respirators, specific work practices, hygiene facilities, medical monitoring etc. are required **if a specific AIRBORNE lead concentration, the action level or permissible exposure level, has been exceeded**. Construction activities that may disturb lead-bearing surfaces include sandblasting, torch cutting, welding, grinding, cutting, etc. The level of airborne lead varies greatly depending on the activity and amount of lead present in the surface. Torch cutting, burning, and sandblasting generally create the highest airborne lead exposures.

**Consumer Products Safety Commission (CPSC)** - The CPSC, in 1978, banned the use of lead in paint for sale to consumers or used in residences if the quantity of lead in the paint is greater than .06% by weight (600 parts per million-PPM). Products manufactured for use by children must not contain more than .009% by weight (90 PPM) in total lead content in accessible parts.

**Housing and Urban Development (HUD)** -HUD rules and guidelines apply to **housing** receiving federal assistance and are designed to ensure that such housing does not present lead-based paint hazards to young children. Specific inspection and lead hazard reduction (abatement) procedures are specified for HUD funded housing. DFD facilities are not HUD funded and therefore not subject to the HUD guidelines.

# *Wisconsin State Agencies:*

**Department of Health Services (DHS)** - DHS is responsible for protecting the public health and provides public outreach and education, HUD grant money, and technical assistance to local health departments regarding lead hazards. DHS (DHS 163) also requires training for renovators that disturbs more than six square feet of interior lead paint, 20 square feet of the exterior lead paint (window replacement with lead paint are always covered regardless of square footage) in single family or multifamily housing or child occupied housing built before 1978. The “Lead Safe Renovator” training requirement does not normally apply to DFD projects unless the work is in a pre-1978 childcare facility or residential dwelling. Zero bedrooms units, such as dormitory rooms, are exempt.

In addition to the Lead Safe Renovator training, DHS 163 requires pre-notification of lead abatement projects along with training and certification for companies and workers conducting lead hazard identification and lead hazard reduction activities in pre-1978 housing and child-occupied facilities. Although DHS 163 does not apply to most DFD projects, it is highly recommended employees conducting lead inspection, sampling and hazard reduction activities associated with DFD properties be certified by DHS. It is important to note that although DHS training and certification may not be required, OSHA training requirements may apply to employees exposed to lead. DHS 163 and State Statutes, Chapter 254, define lead paint as 1.0 milligrams per square centimeter, using x-ray fluorescence (XRF), in the dried film of applied paint or 0.50 % lead by weight (5000 parts per million). Although these levels are used by DFD when defining a lead painted surface, it is possible to generate lead exposure and be regulated by the OSHA Lead Standard below these levels.

**Department of Safety and Professional Services -**The Wisconsin Department of Safety and Professional Services adopt OSHA Standards and require Wisconsin State Agencies to follow the OSHA Standards for State employees. See Federal OSHA above for further detail.

**Department of Natural Resources (DNR)** - The Wisconsin DNR regulates lead emissions to the environment including air, ground, and water. When lead is removed from a substrate (such as by scraping, sandblasting or stripping) proper handling of that waste is required. Generally, lead paint that is attached to its substrate can be disposed of as normal construction & demolition (C&D) waste, but when lead paint or surface coatings are removed or separated from its substrate, the generator of the waste must determine if it is either a listed or characteristic hazardous waste. Lead waste generated using strippers that contain hazardous solvents can cause the waste to be a listed hazardous waste. For example, methylene chloride stripper waste is a listed hazardous waste, so that type of stripper should not be used. A characteristic hazardous waste is a waste that contains certain chemicals in leachable form more than specific concentrations. Paint (or paint removal waste) from older structures may require testing by a Wisconsin certified laboratory using a procedure known as Toxicity Characteristic Leaching Procedure (TCLP) test to determine if it is toxic hazardous waste. Waste that fails this test must be managed as hazardous waste. DOA has established a hazardous waste management contract that must be used by all State agencies for the transport and disposal of hazardous waste. Information on the current contractor can be provided by your Environmental Health and Safety Representative or Purchasing/Procurement contact. Waste that passes the TCLP test is considered non-hazardous and may be disposed of in an approved solid waste landfill. Depending on the quantity of solid waste transported in a year, a solid waste transporter license may be required. The landfill should also be contacted in advance for any specific procedures. A more detailed description of the DNR disposal requirements for lead paint waste can be located by searching “WI DNR lead paint waste disposal”.

**Department of Transportation (DOT)** – The Wisconsin DOT regulates transport of waste in combination with the DNR, Federal DOT and EPA. Generally, these rules require hazardous waste recordkeeping at source and delivery points, labeling and containerizing of transported wastes, transporting only to approved facilities, and waste manifesting. Drivers that haul hazardous waste must also have qualifications and training. The State hazardous waste management contractor is responsible for compliance with these rules.

***Local Rules and Ordinances:***

Local units of government may have additional lead requirements that apply. Check with the local, county and/or municipality for applicable local ordinances. The county or municipal health departments are usually the best contact for additional information.

**DFD RESPONSIBILITIES**

1. DFD is responsible for managing engineering and architectural services and construction contracting on repair and renovation projects on State owned facilities, including projects where lead paint or surface coatings are removed from their substrate.
2. DFD will manage inspections and projects where lead paint or surface coatings are removed from their substrate on DFD facility repair and renovation projects and maintain compliance with applicable regulations.

**AGENCY RESPONSIBILITIES**

1. The agency will be responsible for management of lead bearing surfaces and will be responsible for training agency personnel for this activity. DFD recommends that each agency train a DHS certified Lead Supervisor or Lead Safe Renovator to recognize lead hazards and oversee work that disturbs lead.
2. Each agency has designated an agency representative to be the primary contact with the hazardous waste management vender. The designated agency representatives shall sign all waste manifests as generator.
3. The agency shall maintain records of lead inspections and projects where lead paint or surface coating is removed from their substrate performed by the agency.
4. The agency is responsible for supervising routine facility maintenance activities performed by agency staff or venders where lead bearing surfaces may be encountered. The agency shall maintain compliance with applicable regulations relative to these maintenance activities.
5. The agency shall identify the costs and schedule impact for lead paint or surface coating removal and disposal in project requests.