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To: Agency Facility Managers
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Subject: Guidelines for Lead (Pb) Bearing Surfaces in State Buildings

The Division of Facility 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 at (608) 266-1297 or Tim Stratton (608) 261-4348 with 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 and 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 be disposed of as construction debris in a DNR approved landfill. If lead bearing surfaces are separated from the substrate, the work is likely to generate a hazardous waste and will be considered lead abatement.

Paragraph 4, of the General Requirements of the DFD construction documents identifies applicable OSHA standards regarding lead. All renovation/demolition contractors are responsible for compliance with applicable OSHA standards.

Paragraph 31 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 (State Procurement Bulletin #15-99145-001) 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's Project Representative. Charges for transport and disposal of hazardous waste under state procurement's hazardous waste service contract will be paid directly by the State.

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.

Other requirements as discussed below may apply to lead abatement.

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 child occupied facilities), work practice controls, and proper waste handling and disposal procedures. In Wisconsin, the Department of Health and Family Services (DHFS) 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 Commerce Code) http://www.osha-slc.gov/OshStd_data/1926_0062.html. 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. The majority of 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. Results of paint chip samples are typically reported in % by weight. Currently, DFD considers the surface to be lead containing when the content is above .06% by weight.

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 contain 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 and Family Services (DHFS) - DHFS 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. DHFS (HFS 163) also 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 target housing and child occupied facilities; DHFS rules apply **only** to pre-1978 housing and child-occupied facilities, such as day cares, schools, or residential facilities housing children under age six. It does not apply to other DFD facilities. It is highly recommended, though, that employees conducting lead inspection, sampling and hazard reduction activities associated with DFD properties be certified by DHFS. It is important to note that although DHFS training and certification may not be required, OSHA training requirements may apply to employees exposed to lead. DHFS 163 and State Statutes, Chapter 254, define lead paint as 0.7 milligrams per square centimeter, using x-ray fluorescence (XRF), in the dried film of applied paint or 0.06 % lead by weight (600 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. DHFS lead training and certification rules can be located at <http://www.legis.state.wi.us/rsb/code/hfs/hfs163.pdf>.

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 sandblasting, proper handling of that waste is required. Generally, lead paint that is attached to its substrate can be disposed of as normal construction and demolition waste. Lead waste that has been removed or separated from its substrate must typically be tested by a certified laboratory through a procedure known as Toxic Characteristic Leachate Procedure (TCLP) test to determine if it is hazardous waste. Waste that fails this test must be disposed of as hazardous waste at an approved hazardous waste landfill. Lead waste may also be characterized as a listed hazardous waste depending on the product used to remove it. In particular, product chemical strippers that contain solvents such as methylene chloride should be avoided. 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 (State Bulletin #15-99145-001) 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 transported, 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 waste management and disposal procedures for lead paint waste can be located at http://www.dnr.state.wi.us/org/caer/cea/publications/pubs/wa_173.htm. In addition, DNR waste management rules, NR 600-685, discharge of pollutants, NR 200-299, and air pollution emissions and controls, NR 400-499, specific to lead can be located at <http://www.dnr.state.wi.us/Environment.html>

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 supervising engineering and architectural services on repair and renovation projects on state owned facilities, including lead abatement.
2. DFD will manage inspections and abatement activities on DFD facility repair and renovation projects and maintain compliance with applicable regulations.
3. Where lead abatement is required, DFD will contract directly with the lead abatement contractor.

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 DHFS certified Lead Supervisor to recognize lead hazards and oversee work that disturbs lead.
2. Each agency has designated an agency representative, as defined in state bulletin #15-99145-001, 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 abatement 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 abatement in project requests.