MANAGEMENT OF LEAD-BASED PAINT DEBRIS
NORTH DAKOTA DEPARTMENT OF HEALTH - DIVISION OF WASTE MANAGEMENT
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The North Dakota Department of Health recognizes the potential hazards to human health and the environment from the removal and subsequent management of lead-based paint (LBP) debris. In response to these concerns, the Division of Waste Management has prepared this management outline on LBP debris. Questions regarding the management and disposal of LBP debris should be directed to the Division of Waste Management at 701-328-5166.

What is Lead-Based Paint Debris? LBP debris is any component, fixture or portion of a residence, building or other structure coated wholly or partially with LBP. LBP debris is generated when materials are removed and separated from a building or structure during renovation, remodeling, abatement or demolition activities. The most common examples include, but are not limited to, windows and window casings, trim work, doors, ceilings, walls and floors, cabinetry, gutters and down spouts, fascia, soffits and exterior siding.

LBP debris does not include paint chips and dust, leftover paint or thinner, sludges, solvents, vacuum filter materials, wash waters, sandblasting material, contaminated protective clothing and other wastes such as lead contaminated soils. These materials are regulated as solid waste, and may be hazardous waste.

Household Quantity Exclusion. The North Dakota Hazardous Waste Management Rules specifically exempt hazardous wastes generated by households from strict regulation. These household wastes become subject to the solid waste management rules.

Homeowners who perform renovations or remodeling are not subject to the hazardous waste regulations. Contractors that perform renovations, remodeling or abatement activities on residences, such as single and multiple family dwellings, apartments, hotels and motels, public housing and military barracks, also fall under the household quantity exclusion. Though LBP debris generated from residences is not subject to regulation because of the household quantity exclusion, contractors are still subject to certain inspection and imminent hazard authorities.

LBP debris generated by homeowners and contractors may be disposed in permitted inert, municipal or industrial waste landfills. Homeowners and contractors should try to minimize the amount of dust generated during remodeling and renovation projects and contain the LBP debris in boxes or plastic bags. Homeowners may follow and contractors are required to follow the items outlined in the containment action section.

LBP Debris From Structures Other Than Residences. LBP debris and other wastes generated during renovations, remodeling and demolition activities on structures other than residences may be hazardous waste due to the lead content. As the generator, the contractor is required to make a waste determination which may include sampling and testing of the wastes. Contractors who generate more than 220 pounds per month (total) of hazardous waste must dispose of this waste at a permitted hazardous waste treatment, storage or disposal facility.

To make a waste determination, you may apply your knowledge of the waste from previous experience or test data. Based upon this knowledge and the type of activity, you may be able to support your finding that the waste is nonhazardous. However, your waste determination may be questioned by the landfill authority and the Department.

Operations which remove paint from structures, rather than removing the painted item, concentrate the levels of lead in the waste. These methods will decrease the volume of waste to be disposed, but may cause the contractor to become a regulated hazardous waste generator. These wastes are not considered as LBP debris and most often exhibit hazardous waste characteristics, such as lead or chromium.

LBP debris that is nonhazardous may be disposed in permitted inert, municipal or industrial waste landfills. Contractors must limit public access to nonhazardous LBP debris by placing the material in containers, such as dumpsters, or fencing off the work area, or placing materials directly into a transportation vehicle destined for the disposal facility. The transportation vehicle must be covered to prevent the release of nonhazardous LBP debris to the environment.

Liquid wastes are not permitted in any landfills for disposal. Nonhazardous liquids may be solidified with a sorbent and then landfilled. Wash waters from LBP removal projects must be properly managed and cannot be discharged to a storm sewer or surface water. If you generate wash waters during LBP removal projects, contact the Division of Water Quality at 701-328-5210 to discuss disposal options.

Regulatory Status Regarding Removal. Currently, the North Dakota Department of Health does not have rules that specifically regulate the removal of LBP debris. However, violations of the North Dakota Air Pollution Control Regulations may occur if LBP debris are improperly removed or contained during remodeling and renovation projects. All worker safety provisions under the Occupational Safety and Health Administration (OSHA) should be followed during any LBP debris abatement or removal activities.

EPA guidance recommends against using heat guns to remove LBP from structures. The heat volatilizes residual organics and metals in the LBP which may cause health problems to unprotected workers.

The EPA intends to issue certification and notification requirements for certain LBP removal activities. When the North Dakota Department of Health adopts these regulations, this management outline will be updated.

Containment Action. All LBP debris removal and abatement activities should include a containment plan for the purposes of preventing the dispersal of LBP residues, such as airborne dust, into the environment. Effective containment of LBP removal activities helps to prevent exposure to lead from various routes. Inhalation exposure occurs from airborne dust not contained during removal. Settling of this dust may appear to be proper containment, but the dust still represents an inhalation hazard if the dust is stirred up. Oral exposure to lead occurs when lead dust settles on exposed skin, clothes, food or when lead-contaminated dust or soil is transferred to the mouth and swallowed (for example, by children playing or unprotected workers eating). Skin contact with lead is not usually a significant exposure concern due to the fact that inorganic lead is not readily absorbed through the skin.

A containment plan should address the following:

1. Ensure that fugitive emissions to the air and settling of lead dust onto soil or into water is minimized.

2. Provide for the collection of all waste streams generated during removal operations (liquids, solids, abrasives, dust, etc.) so that the handling and disposal of these wastes is done in strict compliance with all applicable federal, state, and local laws and ordinances.

3. Prevent public exposure to lead and deposition of lead dust onto public or private property.

4. Ensure that the containment can withstand periodic high winds or can be lowered or removed quickly in the event of high winds.

5. Make sure the plan considers the proximity of residential areas, schools, hospitals, day cares, and other facilities.

6. Also consider the proximity of wetland areas and surface water bodies (streams, lakes, rivers, etc.) and the location of structures devoted to water supply or food processing activities.

The degree of containment and environmental controls needed will vary depending on the site-specific conditions and the removal method used. Dry abrasive blasting, although probably the most effective method of removal, is also the method which produces the greatest amount of dust and is the most difficult to contain. Water towers or other tall structures, because of their height and increased air movement, present especially difficult containment when conducting abrasive blasting removals. Whenever possible, alternatives to dry abrasive blasting should be considered. This is even more important when considering the locations of residential areas, schools, and day care facilities where there is a very high potential for human exposure. Some alternatives to dry abrasive blasting are vacuum blasting, hand tool cleaning, gel strippers, and cleaning with power tools with vacuum attachments. Methods which use high or low pressure washes or wet abrasive blasting decrease dust generation, but present other containment problems dealing with capturing liquids for proper disposal.

At a minimum, environmental control measures should include the use of impermeable ground cover, such as plastic sheeting. The ground cover should protect all bare soil and vegetated areas which may be impacted by LBP removal activities. All surfaces should be cleaned thoroughly to remove any loose material before the enclosure is moved. Any questions regarding air issues during LBP removal activities may be directed to the Division of Air Quality at 701-328-5188.

Additional Information Resources. The EPA has published two information documents regarding lead. The documents, *Reducing Lead Hazards When Remodeling Your Home* and *Lead in Your Home: A Parent's Reference Guide*, may be obtained from the EPA's website at http://www.epa.gov/lead or by calling EPA's hotline at 1-800-424-9346.

Contractors performing work for HUD or being paid using HUD funding are also subject to additional requirements under HUD. The *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, June 1995 is available online at http://www.hud.gov/lea/learules.html.

Technical questions requiring a response from the EPA may be referred to Mr. Vern Dander at 303-312-6032.