



**Hennepin Housing Consortium
HOME Investment Partnerships Program
CONSTRUCTION AND REHABILITATION STANDARDS**



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I. Introduction

The Construction and Rehabilitation Standards adopted by the Hennepin Housing Consortium (HHC) for the HOME Investment Partnerships Program (HOME) shall apply to all housing projects assisted with funding. The Construction and Rehabilitation Standards define a standard and code compliance level for the construction and rehabilitation necessary to correct health, safety and building code violations to achieve decent, safe and sanitary affordable housing and.

All housing constructed or rehabilitated with HOME funds must meet all applicable local codes, rehabilitation standards, ordinances and zoning ordinances at the time of project completion, except as provided in paragraph (b) of 24 CFR 92.251. In the absence of a local code for new construction or rehabilitation, HOME assisted new construction or rehabilitation must meet the State of Minnesota adopted, Uniform Building Code (ICBO).

All other HOME funded projects (e.g. acquisition) must meet the State or local housing quality standards and code requirements in absence of a standard or code projects, at a minimum, shall meet the Section 8 Housing Quality Standards (HQS) found in 24 CFR 982.401 at the time of completion. Moreover, other improvement that goes beyond the HSQ criteria shall be undertaken when it is necessary to correct other substandard conditions or deficiencies. These improvements may pertain to, but shall not be limited to, work for structural integrity, functional performance of the systems (electric, plumbing and HVAC), and protection from weather exposure, energy efficiency, accessibility and hazardous material abatement.

As stated in paragraph (b) of Section 92.251, if rehabilitation will occur after the transfer of ownership interest, then before the transfer of the homeownership interest, HHC must:

- Inspect the housing for any defects that pose a danger to health; and
- Notify the prospective purchaser of the work needed to cure the defects and the time by which defects must be cured an applicable property standards met.

Then, the housing must be free from all noted health and safety defects before occupancy and not later than six (6) months after the transfer. And, the housing must meet the standards in the third paragraph above not later than two (2) years after the transfer of the ownership interest.

All referenced codes, standards and regulations shall refer to the latest publication. Applicable codes, standards and regulations are not restricted to those listed in this document.

II. Model Codes, Ordinances and Construction Regulations

The Section 8 Housing Quality Standards shall regulate the minimum standards required for all the projects that will be funded by HHC. The minimum standards may be varied to reflect climatic and geological conditions, security measures, building and fire code compliance, energy conservation and other pertinent housing issues, which may directly affect the living conditions of the household.

Housing Quality Standards:

- ❑ Sanitation – A flush toilet in a separate and private room, a fixed basin with hot and cold running water, and a shower or tub with hot and cold running water shall be present in each dwelling unit and be in working order.
- ❑ Food Preparation and Refuse Disposal – A cooking stove or range, refrigerator with freezer compartment and sink with hot and cold running water shall be present in each dwelling unit and be in working order. Space shall contain adequate area to store, prepare and serve foods in a sanitary manner.
- ❑ Space and Security – Living room, kitchen, bathroom and one sleeping room or living sleeping room be present. Exterior doors and windows accessible from outside of unit shall be lockable.
- ❑ Thermal Environment – Each dwelling unit shall have a heating system that adequately supplies safe heat to all habitable areas and that will be capable of maintaining a thermal environment healthy for the human body.
- ❑ Illumination and Electricity – Living and sleeping rooms each shall be with a minimum of one window. Bathroom and living area shall be with a ceiling or wall type light fixture in working order. A minimum of two electric outlets, one of which may be an overhead light, shall be present and operable in living, kitchen and bathroom areas.
- ❑ Structure and Materials – Ceilings, walls and floors shall not have any serious defects such as severe bulging or leaning, large holes, loose materials, severe buckling or noticeable movement under walking stress, missing parts or other serious damage. Roof structure shall be firm and weather tight. Exterior wall structure and surface shall not have any serious defects such as serious leaning, buckling, sagging, cracks or holes, loose siding, or other serious damage. Interior and exterior stairways, halls, porches, walkways, etc., shall not present a danger of tripping or falling.
- ❑ Interior Air Quality – Dwelling unit shall be free from dangerous levels of air pollution from carbon monoxide, sewer gas, fuel gas, dust, and other harmful air pollutants. Bathroom shall have at least one operable window or other adequate exhaust ventilation.
- ❑ Water Supply – Water supply shall be free from contamination.

- ❑ Lead-Based Paint – Dwelling unit shall be in compliance with HUD Lead Based Paint regulations.
- ❑ Access – Proper means of egress shall be provided. The dwelling unit shall be usable capable of being maintained with unauthorized use of other private properties.
- ❑ Site and Neighborhood – Site and neighborhood shall be reasonably free from disturbing noises and reverberation and other hazards to the health, safety and general welfare of the occupants.
- ❑ Sanitary Condition – The dwelling unit and its equipment shall be free of vermin and rodent infestation.

Inspections and compliance are required both as a condition of application and upon project completion for release of HHC funds or to start the required affordability period.

The local building official shall regulate all permits required by code or ordinance requirements and shall issue the certificate of occupancy after the construction/rehabilitation have been completed. Applicants should arrange with the local building official or HHC staff for a code review or site inspection early in the project planning and budgeting phases, so as to assure that all code deficiencies are identified, budgeted and correctly resolved.

In those instances where various codes and regulations govern a given condition, the terms of the highest or most restrictive standard shall apply. When work is performed on a component of an existing system, the entire system shall be required to meet minimum standards and local code requirements. New construction shall be in accordance with local building code requirements.

Final disbursement of HHC funds may be withheld until all code related improvements have been approved by the local building official and/or all other identified deficiencies have been corrected and inspected by HHC.

References:

- ❑ 2000 International Building Code.
- ❑ MN State Building Code, Chapter 1300-1370, 2003.
- ❑ MN Statute Chapter 326 (Licensing of building and remodeling contractors)
- ❑ HUD Housing Quality Standards, 24 CFR, Chapter 8, Article 882.109
- ❑ MN Plumbing Code, Chapter 4715, 2003
- ❑ Uniform Mechanical Code, 1991.
- ❑ MN Amendments Uniform Mechanical Code.
- ❑ National Electrical Code, 2002
- ❑ Any applicable local, municipal, county state codes, ordinances, zoning regulations, or housing maintenance standards.

III. Energy Codes and Standards

Energy-efficiency features that are considered as cost effective, given consideration to local climatic conditions and fuel prices, shall be required with the funding of HHC projects.

New construction shall be governed by the energy codes and standards of the State of Minnesota.

Energy improvements proposed as part of the rehabilitation may be restricted in structures that do not permit accessibility or become exposed during the rehabilitation and which are not practical when considering economic feasibility, program needs and the material and type of construction involved.

For existing multi-family structures, three or more dwelling units, HHC may require that the owner/applicant contract with an energy auditor who is certified by the State of Minnesota or licensed as a mechanical engineer to perform an energy audit on the structure and to identify energy saving measures and costs.

The following building components shall be evaluated for energy and cost savings (with the exception of those that are not appropriate for the building type or equipment):

- ❑ Quantities and costs of current energy consumption, by fuel type
- ❑ Attic, walls, crawl space and foundation insulation
- ❑ Heat loss through windows and doors
- ❑ Caulking and weather-stripping
- ❑ Vapor barriers, vapor transmission and venting, and moisture condensation
- ❑ Hot water and forced-air heating systems and equipment
- ❑ Domestic water systems and fixtures
- ❑ Heating/venting/air conditioning systems, equipment, motors, controls and metering
- ❑ Electrical service and metering
- ❑ Interior and exterior common area lighting

Where the energy audit identifies excessive energy consumption or alternatives for energy conservation, the applicant/owner shall perform all those conservation measures that will provide seven years or better payback. Other conservation measures with a seven-to-ten payback shall be eligible and considered viable for HHC funding.

References:

- ❑ MN Energy Code, Chapters 7670, 7672, 7674
- ❑ International Energy Conservation Code (IECC 2000)
- ❑ HUD Regulations 24 CFR part 39: "Cost-Effective Energy Efficiency (Conservation) Standards for Rehabilitation of Residential Properties"

HHC also encourages funded project to include the following design features to help reduce energy expenditures, enhance the health, well-being and productivity of the building occupants in funded projects:

- ❖ Minnesota Housing Overlay to the MN Green Communities Criteria.
www.mnhousing.gov
- ❖ Sustainable Design. **www.sustainabledesignguide.umn.edu**
- ❖ Energy Star products, standards and building certification.
www.energystar.gov
- ❖ The Principals of Universal Design. "The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." More information can be found at The Center for Universal Design. **www.design.ncsu.edu/cud/**

IV. Fair Housing and Handicapped Accessibility Regulations and Statutes

Projects may require certain design provisions and/or construction features to accommodate accessibility and occupancy by mentally or physically disabled persons.

Federal Regulations 24 CFR Part 8, which implements Section 504 of the Rehabilitation Act of 1973, stipulates for other rehabilitation projects "...alterations to dwelling units in a multi-family housing project (including public housing) shall, to the maximum extent feasible, be made to be readily accessible to and usable by individuals with handicaps. If alterations of single elements or spaces of a dwelling unit, when considered together, amount to an alteration of a dwelling unit, the entire dwelling unit shall be made accessible. Once **five percent** of the dwelling units in a project are readily accessible to and usable by individuals with mobility impairments, then no additional elements of dwelling units, or entire dwelling units, are required to be accessible under this paragraph. Alterations to common areas or parts of facilities that affect accessibility of existing housing facilities shall, to the maximum extent feasible, be made to be accessible to and usable by individuals with handicaps. For purposes of this paragraph, the phrase "to the maximum extent feasible" shall not be interpreted as requiring that the recipient (including a PHA) make a dwelling unit, common area, facility or element thereof accessible if doing so would impose undue financial and administrative burdens on the operation of the multifamily housing project."

When the anticipated cost of a rehabilitation project consisting of 15 units or more is at least 75 percent of the project replacement cost (excluding land), the accessibility and adaptability requirements are the same as new construction.

New construction projects must be designed to meet the UFAS standards. The also must be constructed with **five percent** of the dwelling units (a minimum of one unit) shall be accessible and adaptable to persons with physical mobility impairments **and two percent** (a minimum of one unit) shall be accessible to hearing **or** vision-impaired persons. These units cannot be the same units.

References:

- ❑ Fed. Reg., 29 U.S.C. 794: "Section 504 of the Rehabilitation Act of 1973"
- ❑ Fed. Reg., 42 U.S.C. 3601-3619: "Fair Housing Act, Title VIII of the Civil Rights Act of 1968"
- ❑ Fed Reg., 24 CFR Part 8: "Non-discrimination Based on Handicap in Federally Assisted Programs and Activities; Final Rule; June 2, 1968"
- ❑ Uniform Federal Accessibility Standards (UFAS) (Fed. Std. 795, April 1, 1988)
- ❑ American National Standard Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People (ANSI 117.1, 1980)
- ❑ MN State Building Code, Chapter 1340: "Facilities for the Handicapped"
- ❑ Fair Housing Amendments Act of 1988
- ❑ Americans with Disabilities Act, July 26, 1990

V. Additional Construction and Rehabilitation Standards Required

HHC reserves the right, where deemed appropriate, to require a standard of quality and performance that may exceed the minimum standards of applicable codes, ordinances or regulations.

A work write-up that identifies the improvements and specifies the type of work needed to meet the Construction and Rehabilitation Standards shall be required for all HOME projects.

All projects require an inspection of the subject property and evaluation of the current physical condition of the site, building (s) and other real estate features, in conjunction with the applicant's proposed rehabilitation scope of work. Based on a comparison of the applicant's proposed work scope and the actual physical condition of the property, HHC may elect to require the applicant to increase or otherwise modify their proposed scope of work to include repair, replacement or reconstruction of physical elements that have failed or are in danger of failing.

In lieu of immediate repair or replacement, HHC may elect to require the applicant to escrow; at loan closing, sufficient funds to cover anticipated future repair or replacement costs.

Depending on the scale of the project, HHC may require two or three acceptable competitive bids for the proposed work. Projects involving 12 or more HOME assisted units shall abide by the provisions of the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act and the other Federal laws and regulations that pertain to labor standards and HUD Handbook 1344.1 (Federal Law Standard Compliance in Housing and Community Development Programs), as applicable. Bids for projects of 12 or more units must be secured from General Contractors and not from individual trades. HHC reserves the right to extend this requirement to any project.

Each existing development shall be evaluated and underwritten on an individual, case-by-case basis to achieve these two equally fundamental goals after rehabilitation.

1. The property shall provide affordable safe, secure, sanitary and functional housing, where its residents can reasonable expect to peacefully reside with dignity and pride.
2. The property shall have a high likelihood of remaining safe, viable and affordable housing by employing prudent management of the property and its resources for the full term of the HHC's loan.

Property owners are encouraged to secure advice and assistance on issues pertaining to codes, regulations and standards from HHC, local building officials, architects, engineers, contractors or other qualified parties or individuals.

VI. Material Standards and Installation

For homeownership and homeowner rehabilitation projects, all installed materials shall be new and of medium grade and quality. Colors, patterns, fixtures or as specified in the work write-up shall be furnished by the contractor from the supplier's available selection. The applicant shall be responsible for costs that exceed a specified cost allowance. The quality of installation shall be in compliance with manufacturer's specifications and trade standards. All operational manuals for newly installed equipment shall be given to the applicant/owner.

All surplus materials delivered to the job site and all materials, fixtures and equipment removed and not reused shall remain or become the property of the contractor and its subcontractors and shall be removed from the job site promptly after completion as well as all rubbish and debris resulting from the contractor's operations. The premises shall be left in broom-clean condition.

For rental projects, HHC has adopted the minimum design construction and material standards included in the Minnesota Housing Finance Agency (MHFA) Multi-family Technical Handbook. This handbook is available on-line or by request from the MHFA.

VII. Asbestos, Radon and Other Environmental Hazards

Asbestos is a mineral fiber that separates into strong, very fine fibers. Until 1970, asbestos was found in a variety of products. The asbestos fibers were added to strengthen and provide heat insulation and fire fibers were added to strengthen and provide heat insulation and fire resistance to materials. The asbestos material, when disturbed (can be crushed by hand pressure or the surface if not sealed), may release fibers, which can be inhaled into the lungs and may create a health hazard.

The risk of lung cancer, asbestosis, and mesothelioma increases with the number of fibers inhaled.

Common products that might have contained asbestos and could release fibers include:

- ❑ Steam pipes, boilers and furnace ducts insulated with an asbestos blanket or paper tape.
- ❑ Resilient floor tiles (vinyl asbestos, asphalt, and rubber), the backing on vinyl sheet flooring, and adhesives used for installing floor tile.
- ❑ Cement sheet, millboard and paper used as insulation around furnaces and wood burning stoves.
- ❑ Door gaskets in furnaces, wood stoves and coal stoves.
- ❑ Soundproofing or decorative material sprayed on walls and ceilings.
- ❑ Patching and joint compounds for walls and ceilings, and textured paints.
- ❑ Asbestos cement roofing, shingles, and siding.
- ❑ Artificial ashes and embers sold for use in gas-fired fireplaces.

When asbestos is positively identified by testing and is endangering the occupant, the asbestos shall be repaired, encapsulated or removed as determined by a qualified and licensed asbestos abatement professional.

Radon is an invisible, odorless, radioactive gas produced by the decay of uranium in rock and soil. Radon decays into radioactive particles, which inhaled, may cause damage to lung tissues and increase the risk of lung cancer.

If the results of the testing, made under closed-house conditions in the lowest livable area are greater than 4 pCi/L then mitigation should be made. The two most common radon measurements devised are the charcoal canister and the alpha track detector.

In detached houses and existing structures, the following approaches can be used for mitigation: (per EPA recommendations)

- ❑ Sealing off entry routes – can include covering exposed earth with concrete or gas-proof liners, sealing cracks and voids in concrete walls and floors, covering sumps and placing removable plugs in untrapped floor drains.
- ❑ House ventilation – involves increasing a house's air exchange rate (the rate at which incoming fresh air replaces existing indoor air) either naturally by opening windows or vents, or mechanically through use of fans or heat recovery ventilators.
- ❑ Soil Ventilation – prevents radon from entering a house by drawing the gas away from the foundation before it can enter. Active ventilation techniques include hollow block wall ventilation and sub-slab ventilation.

For funding an **environmentally hazardous condition** that constitutes a danger or threatens the health and safety of the occupants or neighboring area the condition shall be properly identified and documented for the type of hazard, the degree of health or environmental risk involved and the process for remedial action with a

detailed plan. All work shall comply with governing regulations and codes. HHC reserves the right to determine the scope of work and to deny funding should the corrective/abatement cost exceed the HOME funds available after the rehabilitation work.

References:

- ❑ U.S. Environmental Protection Agency, June 1988: "Asbestos in the Home: A Homeowner's Guide"
- ❑ MN Department of Health, February 1992: "Guidelines for Developing an Effective Asbestos Control Plan"
- ❑ U.S. Environmental Protection Agency, June 1986; "Radon Reduction Techniques for Detached Houses" (Technical Guidance)
- ❑ U.S. Environmental Protection Agency, September 1987: "Radon Reduction Methods: A Homeowner's Guide"
- ❑ MN Indoor Air Quality Task Force, May 1987: "MN Homeowner's Guide to Radon"

VIII. Lead Hazard Evaluation and Reduction

This section of the manual provides a detailed description of the lead hazard evaluation and lead hazard reduction requirements for rehabilitation using HOME funding. This section does not describe requirements for Lead Hazard Evaluation and Reduction if a "lead order" has been issued by an assessing agency or if work is considered "regulated lead work", as defined by the Minnesota Department of Health. While this description is comprehensive, project owners should consult the regulation itself for the exact requirements.

In 1978, the Federal government banned the use of lead in paint. Paint produced before 1950 typically had the highest lead content. It is, therefore, a reasonable assumption that housing constructed prior to 1978 has a high probability of having lead-based paint. Housing built prior to 1978 may contain lead-based paint. Deteriorated lead based paint (chalking, flaking, peeling, cracked or loose) poses the greatest hazard, as lead particles and dust can be released to the surrounding environment, and thus may be inhaled or eaten by a building's occupants. Intact lead-based paint on chewable surfaces (window sills, doors, handrails, etc.) also poses a health risk, as young children and infants may ingest lead by chewing on these surfaces.

On September 15, 1999, the U.S. Department of Housing and Urban Development (HUD) issued a new regulation to protect young children from lead-based paint hazards in housing that is financially assisted by the Federal government or being sold by the government. It went into effect on September 15, 2000. The regulation, "Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance," appears within title 24 of the Code of Federal Regulations (CFR) as part 35 (24 CFR 35). It contains lead hazard evaluation and reduction requirements for properties receiving HUD funding.

Since the HOME Program is a federally funded program provided by HUD, the HUD lead-based paint regulation shall apply to housing developments receiving HOME funds.

However, not all housing developments are covered by the HUD lead-based paint regulation.

Types of Housing Covered by the new HUD Lead-Based Paint Regulation

- Federally owned housing being sold
- Housing receiving a Federal subsidy that is associated with the property, rather than with the occupants (project-based assistance)
- Public housing
- Housing occupied by a family (with a young child) receiving a tenant-based subsidy (such as a voucher or certificate)
- Multifamily housing for which mortgage insurance is being sought
- **Housing receiving Federal assistance for rehabilitation, reducing homelessness, and other special needs (e.g.: HOME Program)**

Types of Housing Not Covered by HUD Lead-Based Paint Regulation

- Housing built since January 1, 1978, when lead paint was banned for residential use
- Housing exclusively for the elderly or people with disabilities, unless a child under age 6 is expected to reside there
- Zero-bedroom dwellings, including efficiency apartments, single room occupancy housing, dormitories, or military barracks
- Property that has been found to be free of lead-based paint by a certified lead-based paint inspector
- Property where all lead-based paint has been removed
- Unoccupied housing that will remain vacant until it is demolished
- Non-residential property
- Any rehabilitation or housing improvement that does not disturb a painted surface.

Other Federal Lead Regulations

In addition to the HUD lead regulations there are other Federal regulations that deal with lead based paint safety. They are:

- **OSHA's Lead Regulations.** (29 CFR 1926.62 and 29 CFR 1910.1025)

These regulations cover Federal worker protection requirements for workers in industry, construction, remodeling, and renovation.

- **EPA's Lead Regulations** (40 CFR 745 and 40 CFR 745.80)

These regulations cover Federal regulations for disposal of lead waste and contractor notification requirements.

Minnesota Department of Health (MDH)

The State of Minnesota also has requirements for lead-based paint hazard surveillance, prevention, evaluation, and reduction. The Minnesota Department of Health (MDH) is in charge of licensing and certification of the lead worker, lead supervisor, lead inspector, lead risk assessor, lead project designer, and lead firm. If an assessing agency has issued a "lead order" or if work is considered "regulated lead work" the requirements for lead hazard evaluation and lead hazard reduction shall comply with Minnesota Statutes 144.9501 to 144.9509.

Visual Assessment

Every HOME assisted housing unit shall have a Visual Assessment conducted by a person trained to identify deteriorated paint (e.g., HQS inspector, rehab specialist). The visual assessment is a surface-by-surface inspection for deteriorated paint consisting of a visual search for cracking, scaling, chalking, peeling, or chipping paint. HUD also recommends that the visual assessment should also include a search for dust and debris, including paint chips. Any deteriorated paint shall be documented in an inspection report. The person(s) conducting the visual assessment for deteriorated paint must be trained using the Visual Assessment Training Module that is available at the HUD website. This visual assessment is normally conducted at time of initial inspection and for rental properties on an annual basis as part of the post rehabilitation activities and ongoing maintenance.

Rehabilitation Assistance

Lead-based paint requirements for rehabilitation developments using HOME funds fall into three categories, which are dependent on the average per unit amount of Federal rehabilitation assistance provided. The three categories are:

- Assistance of up to and including \$5,000 per unit
- Assistance of more than \$5,000 per unit up to and including \$25,000 per unit
- Assistance of more than \$25,000 per unit

Calculating Rehabilitation Assistance

HUD has established a "dual threshold" method of calculating the level of rehabilitation assistance that applies to a rehabilitation development. The level of rehabilitation assistance is determined by taking the lower of:

Per unit rehabilitation hard costs

- Rehabilitation hard costs are the actual costs, regardless of funding source, associated with the physical development of a unit. It excludes: Soft costs, acquisition of property, program administration, relocation, lead-based paint hazard evaluation costs, and lead based paint hazard reduction costs.
- If all the units in a multi-unit development are Federally assisted, the average rehabilitation is calculated by dividing the total rehab hard costs for the development by the total number of units.

- If there are both Federally assisted units and non-assisted units in a multi-unit development use the following formula:

$$\mathbf{a/c + b/d}$$

Where:

- a**=Rehabilitation hard costs, as defined above, for all assisted dwelling units (not including common areas and exterior surfaces);
- b**=Rehabilitation hard costs, as defined above, for common areas and exterior surfaces;
- c**=Number of Federally assisted dwelling units in the development;
- d**=Total number of dwelling units in the development.

-OR-

Per unit Federal assistance

- Includes: All Federal funds provided to the development including funds from program income, typically HOME and CDBG.
- Excludes: Funding such as Low Income Housing Tax Credits and funds provided under the US Department of Energy's Weatherization Program.

The per unit Federal assistance is the total Federal assistance divided by the total number of Federally assisted dwelling units in the development.

Example: A 10-unit property is receiving \$140,000 in HOME Rental Rehab funds for rehabilitation. All units (10) are HOME-assisted. The total applicable rehabilitation hard costs for the development are \$300,000. What category of rehabilitation assistance would apply?

The per unit rehabilitation hard cost is: $\$300,000/10 \text{ units} = \$30,000$
The per unit Federal assistance is: $\$140,000/10 \text{ units} = \$14,000$

The lesser of the two. The category into which a rehabilitation job falls is determined by the lesser of the two threshold numbers. In this example per unit Federal assistance (\$14,000) is the lesser number, so the applicable requirements would be those for the \$5,001 - \$25,000 category.

Major Rehabilitation Requirements of the HUD Lead-Based Paint Regulation

The new HUD regulations will require Projects to make moderate adjustments to their rehabilitation procedures. These adjustments will include providing notice to occupants, obtaining a risk assessment or presuming the presence of lead, focusing on lead-safe work practices and repairing paint deterioration, conducting interim controls or standard treatments, and obtaining a clearance examination.

Projects involved in HOME rehabilitation activities must meet the requirements in the following areas:

- Notification
- Lead Hazard Evaluation
- Lead Hazard Reduction
- On-going Maintenance
- Record Keeping

Notification

Projects must meet three notification requirements:

1. Distribution of Lead Hazard Information Pamphlet (24 CFR 35.130).
2. Notice of Lead Hazard Evaluation or Presumption (24 CFR 35.125).
3. Notice of Lead-Based Paint Hazard Reduction Activity (24 CFR 35.125)

Evaluation and Lead Hazard Reduction

There are three approaches to implementing lead hazard evaluation and reduction for rehabilitation developments. They are as follows: (See Summary of Four Basic Strategies for Lead Hazard Evaluation and Control, Exhibit "A").

- Strategy 1. Do no harm
- Strategy 3. Assess and control lead-based paint hazards
- Strategy 4. Assess and abate lead-based paint hazards

NOTE: Not listed above is Strategy 2. "Identify and Stabilize Deteriorated Paint", because it does not apply to rehabilitation.

The amount of Federal rehabilitation assistance provided dictates which strategy is to be used and the appropriate method of lead hazard evaluation and lead hazard reduction.

Lead Hazard Evaluation Methods

1. **Paint Testing.** Paint testing entails testing selected painted surfaces (usually those surfaces with paint deterioration and surfaces that will be disturbed during rehab) to determine if they contain lead-based paint, using methods such as portable XRF (X-ray fluorescence) lead-in-paint analyzer or laboratory analysis of paint chip samples. A certified lead inspector or Risk Assessor must complete paint testing.

Option: The borrower may **presume that lead-based paint is present or that lead based paint hazards exist** or both. In such cases, evaluation is not required.

2. **Risk Assessment (24 CFR 35.120-b).** Risk Assessment involves the process of determining and then reporting the existence, nature, severity, and location of

lead-based paint hazards in housing through an on-site investigation and the possible means of correcting any hazards identified. Risk Assessments must be completed by a certified Risk Assessor.

Option: The borrower is permitted to conduct a **Lead Hazard Screen** (24 CFR 35.120-b and 35.1320-c) instead of a risk assessment. The lead hazard screen has more stringent requirements for dust lead and soil lead and is only advisable in units that are in good condition and built after 1970. If the lead hazard screen indicates that there is no lead contamination, no risk assessment or lead hazard reduction is required. If the lead hazard screen fails, the Projects must then conduct a full risk assessment.

Lead Hazard Reduction Methods (24 CFR 35.1325 and 35.1330)

Lead hazard reduction methods refer to specific types of treatments to control lead-based paint hazards. As described previously, the level of Federal assistance dictates what method(s) can be used for lead hazard reduction. They are as follows:

1. **Paint Stabilization.** (24 CFR 35.1330-b) This lead hazard reduction method reduces exposure to lead-based paint by repairing any physical defect in the substrate of a painted surface that is causing paint deterioration, removing loose paint and other material from the surface to be treated, and applying a new protective coating or paint.
2. **Interim Controls.** (24 CFR 35.1330) Interim controls temporarily reduce exposure to lead-based paint hazards through repairs, painting, maintenance, special cleaning, occupant protection measures, clearance, and education programs. With continued maintenance, interim controls may last for many years.
3. **Standard Treatments.** (24 CFR 35.120-a and 35.1335) In some cases standard treatments may be conducted in lieu of interim controls on all applicable surfaces, including soil, to control lead-based paint hazards that may be present. All standard treatment methods must follow the same safe work practices and clearance requirements that apply to interim control activities.
4. **Abatement.** (24 CFR 35.1325) Abatement permanently eliminates lead-based paint and/or lead based paint hazards by removing lead-based paint or permanently encapsulating or enclosing the lead-based paint, replacing components with lead based paint, removing lead-contaminated dust and removing or permanently covering lead-contaminated soil. Encapsulation and enclosure require ongoing maintenance to check their effectiveness.

Qualifications To Perform Lead Hazard Reduction

Workers performing **paint stabilization, standard treatment or interim controls** must be trained in accordance with the OSHA requirements (29 CFR 1926.59) and either:

1. Be supervised by an individual certified as a lead-based paint abatement supervisor (40 CFR 745.225), or
2. Have successfully completed one of the following courses:

- A lead-based paint abatement worker course accredited in accordance with 40 CFR 745.225;
- The Lead-Based Paint Maintenance Training Program-Work Smart, Work Wet, and Work Clean to Work Lead Safe, prepared by the National Environmental Training Association for EPA and HUD;
- The HUD/NARI Lead Remodeler's Training Program, developed by HUD and the National Association of the Remodeling Industry; or
- An equivalent course approved by HUD.

Workers performing **abatement** must have completed a Lead-Based Paint Abatement Worker course accredited by EPA. A lead-based paint abatement supervisor certified under a state program authorized by EPA or by EPA itself, must supervise these workers.

Safe Work Practices (24 CFR 35.1350)

Regardless of what method of lead hazard reduction is used, safe work practices shall be followed. Safe work practices include occupant protection, worksite preparation, avoidance of prohibited practices and worksite clean up.

Exception: Safe work practices are not required when maintenance or hazard reduction is less than the following "De Minimus Levels":

- 20 s.f. on exterior surfaces
- 2 s.f. in any one interior room or space
- 10% of the total surface area on an interior or exterior component with small surface area. (e.g. windowsill, trim, baseboards, etc.)

Relocation and Occupant Protection (24 CFR 35.1345)

Appropriate actions must be taken to protect occupants from lead-based paint hazards associated with lead hazard reduction activities. Occupants may not enter the worksite during lead hazard reduction activities. Occupants may not enter the worksite during lead hazard reduction activities. Reentry is permitted only after lead hazard reduction activities are completed and the dwelling has passed a clearance examination.

Occupants of the unit must be temporarily relocated to a suitable unit that is decent, safe, sanitary, and free of lead-based paint hazards during lead hazard reduction activities. Relocation must be done before lead hazard reduction activities begin. Borrower must protect occupants' belongings from lead contamination during lead hazard reduction activities by relocating or covering and sealing them and ensure that the worksite is secured against entry during nonworking hours until the unit passes a clearance examination.

Circumstances when Occupant Relocation is Not Required

Renovation and intervention will not disturb lead-based paint or lead contaminated dust. Hazard reduction activities inside will be completed within one period in eight daytime hours, the site will be contained and the work will not create other safety, health or environmental hazards.

Exterior-only treatment where the windows, doors, ventilation intakes and other openings near the worksite are sealed during hazard reduction activities and cleaned afterward, and a lead-free entry is maintained.

Hazard reduction activities will be completed within five calendar days; the work area is sealed; at the end of each day, the area within 10 feet of the containment area is cleared of debris; occupants have safe access to sleeping areas, bathroom and kitchen facilities; and treatment does not create other safety, health or environmental hazards. At no time can occupants be permitted into the worksites, unless they are employed in the work, until after the work is complete and clearance, if required, has been achieved.

HUD has advised that relocation of elderly occupants is not typically required, so long as complete disclosure of the nature of the work is provided and informed consent of the elderly occupant(s) is obtained before commencement of the work. (See "Interpretive Guidance—The HUD Regulation on Controlling Lead-Based Paint Hazards in Housing Receiving Federal Assistance and Federally Owned Housing Being Sold," 6/22/00 edition.)

Clearance (24 CFR 35.1340)

A clearance examination involves a visual assessment and dust testing to determine if the unit is safe for re-occupancy following a lead hazard reduction activity. Clearance following abatement shall be performed by persons certified to perform risk assessments or lead-based paint inspections. A certified clearance technician may perform clearance following activities, other than abatement. If the test results equal or exceed the designated standards (24 CFR 35.1320-b2), the dwelling unit, worksite, or common area fails the clearance examination. Below are the thresholds for clearance:

	Floors (µg/ft⁵)	Interior Window Sills (µg/ft⁵)	Window Troughs (µg/ft⁵)
Lead in Dust (as measured by a dust wipe sample)	40	250	800

Ongoing Maintenance (24 CFR 35.1355)

All borrowers must institute ongoing maintenance of painted surfaces and safe work practices as part of regular building operations. This includes: A visual inspection of lead-based paint annually and at unit turn-over; repair of all unstable paint; and repair of encapsulated or enclosed areas that are damaged.

- Ongoing Maintenance Records—Borrowers must keep ongoing maintenance records and records of relevant building operations for use during reevaluations.
- Borrowers and their maintenance personnel must be trained in ongoing lead based paint maintenance.

Documentation and Records (24 CFR 35.175)

There are numerous records that Projects must keep to verify that they conducted the required lead hazard response activities. These records must be kept for at least three years after the five-year compliance period has elapsed. Projects are required to provide a copy of any of the following records to MHFA and HUD upon request:

- **Lead Hazard Information Pamphlet**—A record of the distribution of the lead hazard information pamphlet.
- **Notification of Lead Hazard Evaluation and Reduction**—The Projects must keep a copy of each notification of lead hazard evaluation report and lead hazard reduction.
- **Lead Hazard Evaluation Reports**—A copy must be kept of each report of risk assessment, paint testing or lead-based inspection.
- **Clearance and Abatement Reports.**
- **Lead-Based Pain Summary Sheet and Checklist (LBP-1)**

**Requirements for Federal Assistance of \$5,000 Per Unit or Less
“Do No Harm”**

Lead Hazard Evaluation—Paint testing must be conducted to identify lead-based paint on painted surfaces that will be disturbed or replaced, **or** Projects may presume that these surfaces contain lead-based paint. If paint testing is conducted and no lead-based paint is found, no further requirements apply.

Lead Hazard Reduction—Projects must repair all paint that is disturbed during rehabilitation if such paint is found or presumed to be lead-based paint.

If lead paint is detected or presumed, safe work practices must be used during rehabilitation unless no more than 2 square feet of paint is disturbed in any interior room, no more than 20 square feet of paint on exterior surfaces is disturbed, and/or 10% of a building component with a small surface area (such as a painted window frame) is disturbed.

Clearance is required only for the worksite. Clearance is not required if it is known that no lead based paint has been disturbed or if no more than 2 square feet of paint is disturbed in any interior room, no more than 20 square feet of paint on exterior surfaces is disturbed, and/or 10% of a building component with a small surface area (such as a painted window frame) is disturbed.

**Requirements for Federal Assistance of \$5,001 to \$25,000 Per Unit
“Assess and Control Lead Hazards” Lead Hazard Evaluation**

There are two requirements, as follows:

- Paint testing must be conducted to identify lead-based paint on painted surfaces that will be disturbed or replaced, or Projects may presume that these surfaces contain lead-based paint.
- A risk assessment must be conducted prior to rehabilitation to find lead-based paint hazards throughout assisted units, in common areas that service those units, and on exterior surfaces, or Projects may presume that lead-based paint hazards exist and use Standard Treatments option.

Lead Hazard Reduction—If lead-based paint or lead-based paint hazards are detected during the evaluation on interior surfaces in the dwelling units, common areas that service these units, or exterior surfaces, **interim controls** must be implemented to control lead-based paint hazards.

If lead based paint is detected or presumed, **safe work practices** must be used during lead hazard reduction.

Clearance conducted by a certified lead-based paint inspector, risk assessor or clearance/sampling technician is required after lead hazard reduction activities are completed in a unit, common areas serving the unit, and exterior areas where hazard reduction took place. A licensed lead risk assessor must sign Clearance/sampling technician reports.

Options:

- Standard Treatments in lieu of Evaluation
- Lead Hazard Screen versus Risk Assessment (Recommended only on units that are in good condition.)
- Abatement in lieu of interim control

Requirements for Federal Assistance Over \$25,000 Per Unit “Assess and Abate Lead Hazards” Lead Hazard Evaluation
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The two requirements are as follows:

- Paint testing must be conducted to identify lead-based paint on painted surfaces that will be disturbed or replaced, or Projects may presume that these surfaces contain lead-based paint.
- A risk assessment must be conducted prior to rehabilitation to find lead-based paint hazards throughout assisted units, in common areas that service those units, and on exterior surfaces, or Projects may presume that lead-based paint hazards are present and abate all paint that is disturbed and all presumed lead-based paint hazards, including bare soil.

Lead Hazard Reduction—If lead-based paint or lead-based paint hazards are detected during the evaluation on interior surfaces in the dwelling units, common areas that

service these units, or exterior surfaces, **abatement** must be implemented to control lead-based paint hazards.

Exception: If lead-based paint hazards are identified on exterior surfaces that are not to be disturbed by rehabilitation, interim controls may be completed instead on these exterior hazards.

Safe work practices must be used during lead hazard reduction.

Clearance conducted by a certified lead-based paint inspector or risk assessor is required after lead hazard reduction activities are completed in a unit, common areas serving the unit, and exterior areas where hazard reduction took place.

Options:

- Presume Lead in lieu of Evaluation
- Lead Hazard Screen versus Risk Assessment.

EXHIBIT A

FOUR APPROACHES TO IMPLEMENTING LEAD HAZARD EVALUATION AND REDUCTION

APPROACH 1. DO NO HARM		
Lead Hazard EVALUATION	Lead Hazard REDUCTION	OPTIONS
<p>Paint testing performed on surfaces to be disturbed.</p>	<p>Repair paint surfaces disturbed during work.</p> <p>Safe work practices used when working on areas identified as lead based paint.</p> <p>Clearance performed.</p>	<p>Forego paint testing and presume lead based paint is present and use safe work practices on all surfaces being disturbed.</p>
APPROACH 2. IDENTIFY AND STABILIZE DETERIORATED PAINT		
Lead Hazard EVALUATION	Lead Hazard REDUCTION	OPTIONS
<p>Visual assessment performed to identify deteriorated paint.</p>	<p>Paint stabilization of identified deteriorated paint.</p> <p>Safe work practices used.</p> <p>Clearance performed.</p>	<p>Perform paint testing on deteriorated paint. Paint stabilization, safe work practices requirements, and clearance only apply if paint is lead based paint.</p>
APPROACH 3. IDENTIFY AND CONTROL LEAD HAZARDS		
Lead Hazard EVALUATION	Lead Hazard REDUCTION	OPTIONS
<p>Paint testing performed on surfaces to be disturbed.</p>	<p>Interim controls performed on identified hazards.</p> <p>Safe work practices used.</p> <p>Clearance performed.</p>	<p>Forego risk assessment and presume lead based paint and/or lead based paint hazards are present and perform standard treatments.</p>
APPROACH 4. IDENTIFY AND ABATE LEAD HAZARDS		
Lead Hazard EVALUATION	Lead Hazard REDUCTION	OPTIONS
<p>Paint testing performed on surfaces to be disturbed.</p> <p>Risk assessment performed on entire dwelling.</p>	<p>Abatement performed on identified hazards.</p> <p>Interim controls performed on identified hazards on the exterior that are not disturbed by rehabilitation.</p> <p>Safe work practices used.</p> <p>Clearance performed.</p>	<p>Forego paint testing and risk assessment presume lead based paint and/or lead based paint hazards are present and perform abatement on all applicable surfaces – deteriorated, impact, friction, chewable and surfaces to be disturbed.</p>

EXHIBIT B

SUMMARY OF LEAD BASED PAINT REQUIRMENTS BY ACTIVITY

	Rehabilitation (Subpart J)			TBRA (Subpart M)	A, L, SS, O (Subpart K)
	≤\$5,000	\$5001- 25,000	>\$25,000		Homebuyer and Special Needs*
Approach to Lead Hazard Evaluation and Reduction	1. Do No Harm	3. Identify and control lead hazards	4. Identify and abate lead hazards	2. Identify and stabilize deteriorated paint	2. Identify and stabilize deteriorated paint
Notification	Yes	Yes	Yes	Yes	Yes
Lead Hazard Evaluation	Paint Testing	Paint Testing and Risk Assessment	Paint Testing and Risk Assessment	Visual Assessment	Visual Assessment
Lead Hazard Reduction	Repair surfaces disturbed during rehab	Interim Controls	Abatement (Interim Controls on exterior surfaces not disturbed by rehab)	Paint Stabilization	Paint Stabilization
	Safe work practices	Safe work practices	Safe work practices	Safe work practices	Safe work practices
	Clearance	Clearance	Clearance	Clearance (only if lead)	Clearance (only if lead)
Ongoing Maintenance	HOME rental only	HOME rental only	HOME rental only	Yes	Yes (if ongoing relationship)
EIBLL Requirements	No	No	No	Yes	No
Options	Presume lead based paint Use safe work practices	Presume lead based paint and/or hazards Perform standard treatments	Presume lead based paint and/or hazards Abatement on all applicable surfaces	Paint testing on deteriorated paint. Paint stabilization Use safe work practices	Paint testing on deteriorated paint. Paint stabilization Use safe work practices
*Special Needs Housing may be subject to the requirements of Subpart J, M, or K depending on the nature of the assistance provided. However, since most special needs housing involves acquisition, leasing, support services, and operations, for the purposes of this table, it has been placed in this column.					

EXHIBIT C

NEIGHBORHOOD STABILIZATION PROGRAM 3 (NSP3)

REQUIRED STANDARDS ADDITIONS

Hennepin County has added the following required NSP, as follows:

- All gut rehabilitation or new construction (i.e., general replacement of the interior of a building that may or may not include changes to structural elements such as flooring systems, columns or load bearing interior or exterior walls) of residential buildings up to three stories must be designed to meet the standard for Energy Star Qualified New Homes.
- All gut rehabilitation or new construction of mid -or high-rise multifamily housing must be designed to meet American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 90.1-2004, Appendix G plus 20 percent (which is the Energy Star standard for multifamily buildings piloted by the Environmental Protection Agency and the Department of Energy).
- Other rehabilitation must meet these standards to the extent applicable to the rehabilitation work undertaken, e.g., replace older obsolete products and appliances (such as windows, doors, lighting, hot water heaters, furnaces, boilers, air conditioning units, refrigerators, clothes washers and dishwashers) with Energy Star-46 labeled products.
- Water efficient toilets, showers, and faucets, such as those with the WaterSense label, must be installed.
- Where relevant, the housing should be improved to mitigate the impact of disasters (e.g., earthquake, hurricane, flooding, fires).

Hennepin County will also encourage inclusion of the following design features in all activities to help reduce energy expenditures, enhance the health, well-being and productivity of the building occupants in NSP assisted projects:

- ❖ **MINNESOTA HOUSING OVERLAY TO THE MN GREEN COMMUNITIES CRITERIA.**
WWW.MNHOUSING.GOV
- ❖ **SUSTAINABLE DESIGN.** **WWW.SUSTAINABLEDESIGNGUIDE.UMN.EDU**
- ❖ **ENERGY STAR PRODUCTS, STANDARDS AND BUILDING CERTIFICATION**
WWW.ENERGYSTAR.GOV
- ❖ **The Principals of Universal Design; “The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” more information can be found at the Center for Universal Design. www.design.ncsu.edu/cud/**



**Hennepin Housing Consortium
HOME Investment Partnership Program
Construction Rehabilitation Standards**