

MINNESOTA RULES 2001

1269

CHAPTER 4761 DEPARTMENT OF HEALTH RESIDENTIAL LEAD ABATEMENT

	LEAD POISONING PREVENTION		
4761.1000	DEFINITIONS.	4761.1120	CLEARANCE INSPECTIONS.
4761.1010	APPLICABILITY.	4761.1130	MULTISITE, BARE SOIL ANALYSIS.
4761.1020	GENERAL REQUIREMENTS.	4761.1140	LEAD HAZARD SCREEN.
4761.1040	LICENSURE; CERTIFICATION.	4761.1150	LEAD INSPECTION.
4761.1050	PERMITS FOR TRAINING COURSES.	4761.1160	LEAD RISK ASSESSMENT.
4761.1060	CONTENT OF INITIAL TRAINING COURSES.	4761.1170	GENERAL REQUIREMENTS FOR LEAD HAZARD REDUCTION.
4761.1070	CONTENT OF REFRESHER TRAINING COURSES.	4761.1180	RESTRICTED METHODS FOR LEAD HAZARD REDUCTION.
4761.1080	INDEPENDENT TESTING ORGANIZATIONS; PERMITS.	4761.1190	METHODS FOR LEAD HAZARD REDUCTION.
4761.1090	INDEPENDENT TESTING ORGANIZATIONS; REQUIREMENTS.	4761.1200	CONTENT OF REPORTS.
4761.1100	STANDARDS FOR LEAD IN PAINT, DUST, BARE SOIL, AND DRINKING WATER.	4761.1210	ENFORCEMENT.
4761.1110	LEAD HAZARD SCREENS, LEAD INSPECTIONS, LEAD RISK ASSESSMENTS, AND CLEARANCE INSPECTIONS.	4761.1220	VARIANCES.
			LEAD-SAFE HOUSING
		4761.1230	LEAD-SAFE CERTIFICATION OF HOUSING.

4761.0100 [Repealed, 23 SR 1591]

4761.0200 [Repealed, 23 SR 1591]

4761.0300 [Repealed, 23 SR 1591]

4761.0400 [Repealed, 23 SR 1591]

4761.0500 [Repealed, 23 SR 1591]

4761.0600 [Repealed, 23 SR 1591]

4761.0700 [Repealed, 23 SR 1591]

4761.0710 [Repealed, 23 SR 1591]

4761.0720 [Repealed, 23 SR 1591]

4761.0730 [Repealed, 23 SR 1591]

4761.0740 [Repealed, 23 SR 1591]

4761.0750 [Repealed, 23 SR 1591]

4761.0760 [Repealed, 23 SR 1591]

4761.0780 [Repealed, 23 SR 1591]

4761.0790 [Repealed, 23 SR 1591]

4761.0795 [Repealed, 23 SR 1591]

4761.0800 [Repealed, 23 SR 1591]

LEAD POISONING PREVENTION

4761.1000 DEFINITIONS.

Subpart 1. **Scope.** The terms used in parts 4761.1000 to 4761.1230 have the meanings given them in this part and in Minnesota Statutes, section 144.9501.

Subp. 2. **Abrasive blasting.** "Abrasive blasting" has the meaning given in part 7025.0020, subpart 2.

Subp. 3. **Affected property.** "Affected property" means:

- A. a residence;
- B. a school;
- C. a child-occupied facility; or
- D. a playground.

Subp. 4. **Building component.** "Building component" means a specific design or structural element or fixture that is distinguished from other elements or fixtures by form, function, and location.

Subp. 5. **Certified firm.** "Certified firm" means a person who employs individuals to perform regulated lead work and who submits an application for certification to the commissioner that meets the requirements of part 4761.1040.

Subp. 6. **Child-occupied facility.** "Child-occupied facility" means a building, or portion of a building, constructed before 1978 that:

- A. is visited by the same child for at least three hours on each of at least two different days within a week;
- B. the combined weekly visits of the child last at least six hours; and
- C. the combined visits of the child within a 90-day period last at least 60 hours.

Child-occupied facility includes the indoor and outdoor spaces that are used to provide a child care program, as defined in part 9503.0005. The term includes the exterior structure and ground surfaces.

Subp. 7. **Documented methodologies.** "Documented methodologies" means methodologies described in:

- A. United States Environmental Protection Agency, Residential Sampling for Lead: Protocols for Dust and Soil Sampling (EPA 747-R-95-001) (March 1995);
- B. Soil Testing and Research Analytical Laboratories, Department of Soil Science/Agricultural Experiment Station, University of Minnesota, Determination of Lead in Soil (July 1990);
- C. American Society for Testing and Materials, Standard Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques (E 1728 - 95) (October 1995);
- D. American Society for Testing and Materials, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust (E 1792 - 96a) (November 1996); or
- E. American Society for Testing and Materials, Standard Practice for Collection of Floor Dust for Chemical Analysis (D 5438 - 94) (August 1994).

The publications listed in items A to E are incorporated by reference. The publications are not subject to frequent change and are available through the Minitex interlibrary loan system.

Subp. 8. **High efficiency particulate air filter.** "High efficiency particulate air filter" means a filter capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 microns in diameter or larger.

Subp. 9. **Modified-wet abrasive blasting.** "Modified-wet abrasive blasting" has the meaning given in part 7025.0020, subpart 8.

Subp. 10. **Person.** "Person" has the meaning given in Minnesota Statutes, section 326.71, subdivision 8.

Subp. 11. **Playground.** "Playground" means an open area, including a vacant lot, used for outdoor games, recreation, and amusement that may contain a swing, seesaw, slide, or other means for children's recreation and play.

Subp. 12. **Regulated lead work.** "Regulated lead work" means a lead hazard screen, a lead inspection, a lead risk assessment, lead hazard reduction including abatement, swab team services, or a lead project design performed on or for affected property, whether required by law or undertaken voluntarily.

MINNESOTA RULES 2001

1271

RESIDENTIAL LEAD ABATEMENT 4761.1010

Subp. 13. **Residence.** "Residence" means:

A. a structure used or intended for use as single family habitation, including exterior structure and ground surfaces, and every other structure located within the same lot; or

B. a dwelling unit within a structure used or intended for use as multifamily habitation, including common areas located within the same lot, exterior structure, and ground surfaces, but not including other dwelling units.

Subp. 14. **School.** "School" means either a public school as defined in Minnesota Statutes, section 120.05, subdivision 2, clause (1), or a nonpublic school as defined in Minnesota Statutes, section 120.101, subdivision 4, that ordinarily enrolls pupils in prekindergarten through grade 6, or any portion thereof. The term includes the exterior structure and ground surfaces.

Subp. 15. **Vacuum blasting.** "Vacuum blasting" has the meaning given in part 7025.0020, subpart 14.

Subp. 16. **Water blasting.** "Water blasting" means the use of pressurized water to remove a surface coating.

Subp. 17. **Window sill.** "Window sill" means the interior horizontal ledge at the base of a window opening. Window sill is also known as the window stool.

Subp. 18. **Window well.** "Window well" means the horizontal surface on which the sash of a window sits when the window is closed. Window well is also known as the window trough.

Subp. 19. **X-ray fluorescence analyzer.** "X-ray fluorescence analyzer" means a device that uses gamma ray-induced fluorescence of lead atoms to measure the lead content of material.

Subp. 20. **Zero-bedroom residence.** "Zero-bedroom residence" means a dwelling unit that does not have a room used for sleeping that is separated from the other living areas within the dwelling unit by floor-to-ceiling walls with access through an entryway that may or may not have a closeable door.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1010 APPLICABILITY.

Subpart 1. **Persons affected.** Parts 4761.1000 to 4761.1220 apply to persons, including assessing agencies, who do regulated lead work in or for affected property.

Subp. 2. **Exceptions.** Parts 4761.1000 to 4761.1220 do not apply to:

A. work that is performed for any purpose other than the express purpose of regulated lead work;

B. an emergency shelter home or emergency shelter service;

C. housing for the elderly or persons with disabilities unless at least one child, who is less than 72 months of age, resides or is expected to reside in the housing;

D. a zero-bedroom residence, unless occupied by a child with an elevated blood lead level for which a lead risk assessment is required;

E. a foster home occupied by a child for no more than 90 days if the foster care is provided by an individual who is related, as defined in Minnesota Statutes, section 245A.02, subdivision 13;

F. a foster home occupied by a child for no more than 30 days if the foster care is not provided by an individual who is related, as defined in Minnesota Statutes, section 245A.02, subdivision 13;

G. a structure that is totally vacated within 30 days of the issuance of lead orders and that remains unoccupied until the structure is totally demolished, which must be completed within two years of the date of the orders; or

H. chemical testing with a kit for the on-site, qualitative detection of lead.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1020 GENERAL REQUIREMENTS.

Subpart 1. **License required.** Except as provided under this part, an individual must obtain the appropriate license under part 4761.1040 before doing regulated lead work. An individual who is required by parts 4761.1000 to 4761.1220 to have a license and who is doing regulated lead work must have the required license in personal possession and, on request, must show it to a representative of the commissioner or of the assessing agency with jurisdiction at the lead work site.

Subp. 2. **Training permit.** A training course provider must obtain a permit for a training course under part 4761.1050 before representing the course as qualifying trainees for licensure under part 4761.1040.

Subp. 3. **Owner exemption.** An individual who is the owner of property on which regulated lead work is to be performed or an adult individual who is related to the property owner, as defined in Minnesota Statutes, section 245A.02, subdivision 13, is exempt from the requirements to obtain a license according to items A and B.

A. The individuals are exempt from obtaining a license to collect a sample of paint, dust, bare soil, or drinking water from the property for analysis at a laboratory.

B. The individuals are exempt from obtaining a license to perform lead hazard reduction on their property, but the lead hazard reduction must be performed according to the methods in parts 4761.1170 to 4761.1190.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1030 MR 1999 [Expired, 23 SR 1591]

4761.1040 LICENSURE; CERTIFICATION.

Subpart 1. **General requirements.** The requirements of this subpart apply to an applicant for licensure as a lead inspector, lead risk assessor, lead worker, lead supervisor, or lead project designer and to an applicant for certification as a certified firm.

A. A person must obtain the appropriate license or certificate before performing regulated lead work.

B. A lead inspector must perform regulated lead work under the supervision of a lead risk assessor. A lead worker must perform regulated lead work under the supervision of a lead supervisor.

C. A person who employs individuals to perform regulated lead work outside of the person's property must obtain certification as a certified firm.

D. An individual who performs regulated lead work must be employed by a certified firm unless:

(1) the individual is a sole proprietor and does not employ any other individual who performs regulated lead work;

(2) the individual is employed by a person that does not perform regulated lead work outside of the person's property; or

(3) the individual is employed by an assessing agency.

E. A swab team worker must obtain licensure as a lead worker.

F. An individual may not be licensed as both a lead worker and a lead supervisor. An individual may not be licensed as both a lead inspector and a lead risk assessor.

G. An individual or firm that is licensed or certified under this chapter and that employs a subcontractor to perform regulated lead work must ensure that the subcontractor is licensed or certified under this chapter.

MINNESOTA RULES 2001

1273

RESIDENTIAL LEAD ABATEMENT 4761.1040

Subp. 2. Qualifications; application.

A. An individual must complete a training course permitted by the commissioner to qualify for licensure as a lead inspector, lead risk assessor, lead worker, lead supervisor, or lead project designer, according to subparts 5 to 9.

B. A license application must be submitted on a form provided by the commissioner. A license application must include:

(1) a photocopy of a diploma issued to the applicant and signed by an authorized representative for an appropriate training course that has been permitted by the commissioner;

(2) documentation that the applicant passed an examination, within six months after the end of the initial training course or within six months after an examination is permitted by the commissioner, whichever is later, that was administered by the commissioner or an independent testing organization permitted by the commissioner; and

(3) verifiable documentation that the applicant has the additional education or experience required in subpart 6, item B, subpart 8, item B, or subpart 9, item B.

C. An applicant for certification as a certified firm must submit an application on a form provided by the commissioner. The applicant must affirm that only licensed individuals will be hired to perform regulated lead work.

D. The commissioner shall review and approve an application or notify the applicant of any deficiencies. The commissioner shall reject a deficient application after 60 days unless the applicant corrects the application.

Subp. 3. Expiration and renewal.

A. A license is valid for 12 months from the last day of the initial training course required to obtain the license or 12 months from the day that the independent examination was first available for those licenses for which an examination is required. In no case shall a license be valid for more than 12 months. A license that is renewed is valid for 12 months after the expiration date of the initial license.

B. An application for renewal must be postmarked no later than 12 months after the expiration date of the initial license. To renew a license, an individual must complete a refresher training course before the expiration date of the license. An individual has an additional 12 months after the expiration date to renew the license based on a refresher course but must not perform regulated lead work until the license is renewed. A refresher training course may only be used to renew a license for one renewal period. An individual does not have to take an independent examination permitted by the commissioner to renew a license. A refresher training course may be taken no sooner than six months before the expiration date of the license to be renewed.

C. An individual who fails to renew a license within 12 months after the expiration date of the license may not renew the license but must successfully complete an initial training course and pass an independent examination designated by the commissioner in order to qualify for a new license. The new license is valid for 12 months after the last day of the initial training course required to obtain the license.

D. A certified firm must renew certification each year within 60 days before the expiration date of the certificate. A renewed certificate is valid for 12 months from the expiration date of the previous certificate.

Subp. 4. Fees.

A. A fee of \$50 is required with an application for a license for lead worker, lead supervisor, or lead inspector.

B. A fee of \$100 is required with an application for a license for lead risk assessor or lead project designer.

C. A fee of \$100 is required with an application for certification as a certified firm.

D. Fees are not refundable after review of the application has begun.

Subp. 5. **Lead inspector.** An applicant for licensure as a lead inspector must successfully complete a training course for lead inspector.

Subp. 6. **Lead risk assessor.**

A. An applicant for licensure as a lead risk assessor must successfully complete the training courses for both lead inspector and lead risk assessor.

B. In addition to successful completion of training courses, an applicant must have at least one of the following qualifications to obtain a license as a lead risk assessor:

(1) a bachelor's degree and one year of experience in regulated lead work, asbestos abatement, or other environmental remediation or in regulating lead work;

(2) an associate's degree and two years of experience in regulated lead work, asbestos abatement, or other environmental remediation or in the childhood lead poisoning prevention program of a governmental agency;

(3) designation as a certified industrial hygienist, registered professional engineer, registered architect, certified safety professional, or registered public health sanitarian; or

(4) a high school diploma and at least three years of experience in regulated lead work, asbestos abatement, or other environmental remediation or in the childhood lead poisoning prevention program of a governmental agency.

Subp. 7. **Lead worker.** An applicant for licensure as a lead worker must successfully complete a training course for lead worker.

Subp. 8. **Lead supervisor.**

A. An applicant for licensure as a lead supervisor must successfully complete a training course for lead supervisor.

B. In addition to successful completion of the training course, an applicant must have at least one of the following qualifications to obtain a license as a lead supervisor:

(1) at least one year of experience as a licensed lead worker;

(2) at least one year of experience in the childhood lead poisoning prevention program of a governmental agency; or

(3) at least two years of experience in other environmental remediation.

Subp. 9. **Lead project designer.**

A. An applicant for licensure as a lead project designer must successfully complete training courses for both lead supervisor and lead project designer.

B. In addition to successful completion of training courses, an applicant must have at least one of the following qualifications to obtain a license as a lead project designer:

(1) a bachelor's degree in engineering or architecture and one year of experience in building construction or design; or

(2) four years of experience in building construction or design.

Subp. 10. **Training courses; other jurisdictions.** An applicant must successfully complete either a training course permitted under part 4761.1050 or a training course in a jurisdiction with whom the commissioner has a written agreement to accept the training courses. An agreement must be with a state or a federally recognized Indian tribe or the United States Environmental Protection Agency in a jurisdiction that is federally administered.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: 23 SR 1591

MINNESOTA RULES 2001

1275

RESIDENTIAL LEAD ABATEMENT 4761.1050

4761.1050 PERMITS FOR TRAINING COURSES.

Subpart 1. **General requirement.** The requirements of this part apply to all training courses that are intended to qualify trainees for licensure under part 4761.1040. A training course provider must obtain a permit under this part before advertising or presenting a lead training course as qualifying trainees for licensure under part 4761.1040.

Subp. 2. **Application; initial and refresher courses.**

A. An application for a permit must be submitted on a form provided by the commissioner for a training course intended to qualify or renew qualifications for individuals to be licensed as lead supervisors, lead workers, lead risk assessors, lead inspectors, or lead project designers.

B. An application must be submitted at least 120 days before the course is scheduled to be presented. Permits shall not apply to courses that were presented before the date of the permit, except as provided under part 4761.1030 to provide for a transition from the rules in effect before February 1, 1999.

C. An applicant must provide one copy of videotapes or audiotapes and three copies of all other instructional materials to be used, including:

- (1) the instructor manual;
- (2) the trainee manual;
- (3) paper prints of transparencies or slides;
- (4) a sample diploma;
- (5) a sample sign-in sheet;
- (6) materials to be provided to the trainee;
- (7) the course agenda;
- (8) all questions that might be used in the course test with the correct answers identified and the proportion of course test questions devoted to each major topic in the course;
- (9) a description of the hands-on evaluation of trainees' ability to do work practices for courses that include hands-on training; and
- (10) a description of the instructor's qualifications.

D. An applicant must identify the facilities in which the course will be presented.

E. The commissioner shall review and approve an application or notify the applicant of any deficiencies. The commissioner shall reject a deficient application after 60 days unless the applicant corrects the deficiencies.

Subp. 3. **Expiration.** A permit is valid for two years.

Subp. 4. **Fees.**

A. An applicant for a training course permit must include payment of a fee as follows:

- (1) \$500 for a permit for an initial training course;
- (2) \$250 for renewal of a permit for an initial training course;
- (3) \$250 for a permit for a refresher training course; and
- (4) \$125 for renewal of a permit for a refresher training course.

B. Fees are not refundable after review of the application has begun.

Subp. 5. **Required personnel.**

A. An applicant must provide verifiable documentation that the training program employs a training manager who has experience, education, or training in regulated lead work, asbestos related work, asbestos management activities, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene and one of the following:

(1) at least two years of experience, education, or training in teaching adults;

(2) a bachelor's or graduate degree in building construction technology, engineering, industrial hygiene, safety, public health, education, business administration, program management, or a related field; or

(3) at least two years of experience in managing a training program in environmental hazards.

B. An applicant must provide verifiable documentation that the training program employs a principal instructor for each training course who has:

(1) experience, education, or training in teaching adults;

(2) successfully completed a training course that has been permitted under this part:

(a) for lead supervisor, if instructing courses for lead worker, lead supervisor, or lead project designer; or

(b) for lead risk assessor, if instructing courses for lead inspector or lead risk assessor; and

(3) experience, education, or training in lead or asbestos abatement, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene.

Subp. 6. Duties.

A. A training manager is responsible for ensuring that:

(1) each course is presented in the manner described in the application for which a permit was granted;

(2) each trainee is in attendance for the full duration of the course;

(3) the course test and hands-on skills evaluation accurately reflect a trainee's understanding of the course material;

(4) a quality control plan is developed and implemented for each course to maintain and improve the quality of the course by revising materials to reflect technical innovations and amendments to statutes or rules and to annually review the principal instructor's competency;

(5) the performance and effectiveness of principal instructors are reviewed annually;

(6) notice on a form provided by the commissioner, which includes the agenda with instructors identified, qualifications of all instructors, and any changes to course materials and handouts provided by the instructors, is provided to the commissioner at least five working days before the presentation of a course and at least three working days before amendment of a notice or cancellation of a course; and

(7) properly identified department of health staff are allowed to audit the course, including testing and evaluation of trainees, without charge.

B. The principal instructor for each course must be present during all instruction and is responsible for supervising all other instructors.

C. The training course provider must notify the commissioner at least five working days before presenting a training course if either the training manager or the principal instructor is replaced and must provide the information required in subpart 5 for the new training manager or principal instructor.

D. A training course provider may not allow an instructor to present information at a training course that the instructor intends to complete as a trainee to obtain or renew a license under parts 4761.1000 to 4761.1220.

E. Training in the use of an x-ray fluorescence analyzer must comply with chapter 4730.

Subp. 7. Recordkeeping; reporting.

A. A training course provider must retain and, on request, make available at no charge to the commissioner:

MINNESOTA RULES 2001

1277

RESIDENTIAL LEAD ABATEMENT 4761.1060

- (1) all documents that demonstrate the qualifications of the training manager and all instructors, including annual performance evaluations;
- (2) current curriculum and course materials and documents reflecting changes made to the materials;
- (3) all questions that might be used in the course test with the correct answers identified and the proportion of course test questions devoted to each major topic in the course;
- (4) information regarding how the hands-on assessment is conducted including:
 - (a) who conducts the assessment;
 - (b) how the skills are graded;
 - (c) what facilities are used; and
 - (d) the pass or fail rate;
- (5) the quality control plan required under subpart 6, item A, subitem (4);
- (6) results of each trainee's hands-on skills assessments and course tests and a record of each trainee's attendance as recorded on sign-in forms and course completion diploma, which must have a unique identification number; and
- (7) any other material that was submitted as part of the application for a permit.

B. A training course provider must retain the records under item A at the address specified on the permit application for at least three years and six months.

C. A training course provider must notify the commissioner in writing within 30 days after changing the address specified on its application or transferring records from that address. Before a training course provider ceases operations, the provider must deposit its training records with an individual who will maintain the records for the required time and must provide the name and address of the individual to the commissioner.

D. A training course provider must report to the commissioner, on a form provided by the commissioner, within five working days after the end of each course:

- (1) each trainee's name and current address;
- (2) the name of the course completed;
- (3) the date of the course; and
- (4) the location at which the course was presented.

Subp. 8. **Other jurisdictions.** Training course providers located in other states, or in the jurisdiction of a federally recognized Indian tribe, must satisfy the requirements of item A or B to qualify trainees for licensure in Minnesota:

A. a permit must be obtained under this part to present a course in Minnesota; or

B. a permit or the equivalent approval must be obtained from the state or Indian tribe in whose jurisdiction the course will be presented or from the United States Environmental Protection Agency in a federally administered jurisdiction and with whom the commissioner has a written agreement to accept training courses.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1060 CONTENT OF INITIAL TRAINING COURSES.

Subpart 1. **General requirements.** The requirements in this subpart apply to the training courses described in subparts 2 to 6.

A. A training hour equals 50 minutes of instruction.

B. A course must be completed within 30 calendar days.

MINNESOTA RULES 2001

4761.1060 RESIDENTIAL LEAD ABATEMENT

1278

C. "Hands-on instruction" means that a trainee spends a portion of the course personally using tools or equipment appropriate to the course being presented.

D. At least one instructor must present hands-on training for every eight trainees.

E. Without applying for a new or amended permit, the training course provider:

(1) must update the course as needed to include amendments to relevant law or to other governmental documents used in the course; and

(2) may update the course to include advances in technology that affect lead measurement or lead hazard reduction.

F. A course test must be administered to each trainee after an initial or refresher training course.

Subp. 2. Lead inspector.

A. An initial training course for a lead inspector must last a total of at least 24 training hours, including at least eight training hours of hands-on instruction.

B. The course must cover:

(1) the role and responsibilities of a lead inspector;

(2) background information on the uses of lead in consumer products and on the adverse health effects of lead;

(3) background information on federal regulations, state rules, and local ordinances that govern regulated lead work, including the requirements in part 4730.0400 for registration of x-ray fluorescence analyzers;

(4) inspection methods for lead-based paint, including selection of rooms and components for sampling or testing;

(5) sampling methods for paint, dust, bare soil, and drinking water and random sampling techniques;

(6) standards and clearance inspections;

(7) report writing; and

(8) recordkeeping.

C. Hands-on instruction must be provided for item B, subitems (4) to (7).

Subp. 3. Lead risk assessor.

A. An initial training course for a lead risk assessor must last a total of at least 16 training hours, including at least four training hours of hands-on instruction.

B. The course must cover:

(1) the role and responsibilities of a lead risk assessor;

(2) background information on doing a risk assessment;

(3) sources of environmental lead contamination, including paint, dust, bare soil, drinking water, air, packaging, and food;

(4) lead hazard screening protocol, including certification of housing as lead-safe under part 4761.1230;

(5) visual methods for identifying potential sources of lead, including lead-based paint;

(6) sampling methods for paint, dust, bare soil, drinking water, and other potential sources of lead exposure;

(7) interpretation of sampling results, including application of standards and clearance inspections;

(8) development of hazard control options, including lead hazard reduction, and operations and maintenance activities that reduce lead hazards; and

(9) report writing.

C. Hands-on instruction must be provided for item B, subitems (5) to (9).

MINNESOTA RULES 2001

1279

RESIDENTIAL LEAD ABATEMENT 4761.1060

Subp. 4. **Lead worker.**

A. An initial training course for a lead worker must last a total of at least 16 training hours, including at least eight training hours of hands-on instruction.

B. The course must cover:

- (1) the role and responsibilities of a lead worker;
- (2) background information on the uses of lead in consumer products and on the adverse health effects of lead;
- (3) background information on federal regulations, state rules, and local ordinances that govern regulated lead work, including the requirements of Code of Federal Regulations, title 29, section 1926.62, for the use of personal protective clothing and respiratory protection;
- (4) recognition and control of lead hazards;
- (5) methods of lead hazard reduction, including abatement and in-place management, and restricted methods for interior and exterior paint, interior and exterior dust, bare soil, and drinking water;
- (6) daily and final cleanup methods; and
- (7) clearance inspections.

C. Hands-on instruction must be provided for item B, subitems (4) to (6).

Subp. 5. **Lead supervisor.**

A. An initial training course for a lead supervisor must last a total of at least 32 training hours, including at least eight training hours of hands-on instruction.

B. The course must cover:

- (1) the role and responsibilities of a lead supervisor;
- (2) background information on the uses of lead in consumer products and on the adverse health effects of lead;
- (3) background information on federal regulations, state rules, and local ordinances that govern regulated lead work, including the requirements of Code of Federal Regulations, title 29, section 1926.62, for the use of personal protective clothing and respiratory protection;
- (4) liability and insurance issues related to lead hazard reduction;
- (5) development and implementation of an occupant protection plan;
- (6) interpretation of risk assessment and inspection reports;
- (7) recognition and control of lead hazards;
- (8) methods of lead hazard reduction, including abatement and in-place management, and restricted methods for interior and exterior paint, interior and exterior dust, bare soil, and drinking water;
- (9) daily and final cleanup methods;
- (10) clearance inspections;
- (11) waste disposal; and
- (12) recordkeeping.

C. Hands-on instruction must be provided for item B, subitems (6) to (8).

Subp. 6. **Lead project designer.**

A. An initial training course for a lead project designer must last a total of at least eight training hours.

B. The course must cover:

- (1) the role and responsibilities of a lead project designer;
- (2) development and implementation of an occupant protection plan;
- (3) methods of lead hazard reduction, including abatement and in-place management, and restricted methods for interior and exterior paint, interior and exterior dust, bare soil, and drinking water;
- (4) clearance inspections; and

(5) integration of regulated lead work with modernization and rehabilitation projects.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1070 CONTENT OF REFRESHER TRAINING COURSES.

Subpart 1. **General requirements.** The requirements of this subpart apply to all refresher training courses.

A. A training hour equals 50 minutes of instruction.

B. A course must be completed within 30 calendar days.

C. Without applying for a new or amended permit, the training course provider:

(1) must update the course as needed to include amendments to relevant law or to other governmental documents used in the course; and

(2) may update the course to include advances in technology that affect lead measurement or lead hazard reduction.

Subp. 2. Length; content.

A. A refresher course must last at least eight training hours for lead inspectors, lead risk assessors, lead workers, and lead supervisors. A refresher course for lead project designers must last at least four training hours.

B. A refresher course must review the topics of the corresponding initial training course and cover current safety practices, current federal regulations and state rules on regulated lead work, and current technologies for regulated lead work.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1080 INDEPENDENT TESTING ORGANIZATIONS; PERMITS.

Subpart 1. **Applicability.** This part applies to a person who seeks a permit to administer an examination that is independent of a training course as required under part 4761.1040, subpart 2, item B, subitem (2), and that is intended to qualify individuals to be licensed as lead inspectors, lead risk assessors, lead workers, lead supervisors, or lead project designers.

Subp. 2. **Application.** A permit application must be submitted on a form provided by the commissioner and must comply with items A to D.

A. Three copies of an application must be submitted at least 120 days before the scheduled administration of an examination.

B. An application must include all of the questions that may be used on the examination with the correct answer indicated for each question and with possible answers for multiple choice questions. The questions must address the topics listed in part 4761.1060, subparts 2 to 6. The application must indicate the proportion of questions that will address each topic.

C. Except for an examination that was developed by or for the United States Environmental Protection Agency, an application must document that the examination meets the validity standards for educational and psychological testing specified in American Psychological Association, Standards for Educational and Psychological Testing (1985). The standards are incorporated by reference, are not subject to frequent change, and are available through the Minitex interlibrary loan system.

D. An application must include an assurance that each examination will consist of at least 75 questions and that a passing score will be at least 70 percent correct answers. An application must include documentation that the examination evaluates an individual's understanding of the topics in part 4761.1060, subparts 2 to 6, as appropriate to each examination.

MINNESOTA RULES 2001

1281

RESIDENTIAL LEAD ABATEMENT 4761.1100

Subp. 3. **Security.** An applicant must describe how the security of the examination questions will be maintained.

Subp. 4. **Review.** The commissioner shall review and approve an application or notify the applicant of any deficiencies. The commissioner shall reject a deficient application after 60 days unless the applicant corrects the application.

Subp. 5. **Permit period.** A permit issued under this part is valid for two years from the date of issuance.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: 23 SR 1591

4761.1090 INDEPENDENT TESTING ORGANIZATIONS; REQUIREMENTS.

Subpart 1. **Examination administration.** An independent testing organization permitted under part 4761.1080 must:

A. notify the commissioner, on a form provided by the commissioner, of the time and location of a scheduled examination at least 14 days before administering the examination and at least 24 hours before canceling a scheduled examination;

B. allow access to the commissioner to monitor an examination;

C. verify the identity of each individual taking an examination by requiring a picture identification at the time the individual takes the examination; and

D. verify that each individual has an original course completion certificate or diploma for a course appropriate to the examination to be taken.

Subp. 2. **Recordkeeping; reporting.** An independent testing organization permitted under part 4761.1080 must:

A. report to the commissioner, on a form provided by the commissioner, within five working days after the completion of an examination, and maintain for at least three years the following information:

(1) the name and current address of each individual who completes an examination;

(2) the name of the examination completed and the score received by each individual;

(3) the date of the examination; and

(4) the location where the examination was administered; and

B. annually provide a report to the commissioner that statistically evaluates the validity of examinations administered during the calendar year.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: 23 SR 1591

4761.1100 STANDARDS FOR LEAD IN PAINT, DUST, BARE SOIL, AND DRINKING WATER.

Subpart 1. **Paint.** Paint is lead-based if the paint:

A. contains lead in a concentration of at least one-half of one percent (5,000 parts per million) or more by dry weight as measured by atomic absorption spectrophotometry or by quantitative chemical analysis; or

B. registers at least one milligram of lead per square centimeter or more as measured by an x-ray fluorescence analyzer, unless atomic absorption spectrophotometry or quantitative chemical analysis shows that the lead content is less than one-half of one percent by dry weight.

Subp. 2. **Dust.** Dust is lead-contaminated if atomic absorption spectrophotometry or quantitative chemical analysis determines that the dust contains at least:

A. 50 micrograms of lead per square foot on an interior hard-surfaced floor or carpet;

B. 250 micrograms of lead per square foot on a window sill; or

C. 800 micrograms of lead per square foot on a window well.

Subp. 3. **Bare soil.** Bare soil on residential property or on a playground is lead-contaminated if it contains lead in a concentration of at least 1/100 of one percent (100 parts per million) by weight.

Subp. 4. **Drinking water.** Drinking water is lead-contaminated if it contains at least 15 micrograms of lead per liter of water.

Subp. 5. **Clearance inspection.** Lead hazard reduction, including abatement and swab team services, is successfully completed when a clearance inspection is performed according to parts 4761.1110 and 4761.1120 and demonstrates that no deteriorated lead-based paint is present and that no lead-contaminated dust or bare soil is present that exceeds the standards in subparts 2 and 3, respectively. If the initial lead risk assessment failed to identify a source of lead exposure from the paint, dust, or bare soil, the clearance inspection must confirm that drinking water is available that does not exceed the standard in subpart 4.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1110 LEAD HAZARD SCREENS, LEAD INSPECTIONS, LEAD RISK ASSESSMENTS, AND CLEARANCE INSPECTIONS.

Subpart 1. General requirements; notices.

A. An assessing agency must conduct a lead risk assessment of affected property that is accessible to a child or pregnant woman with the blood lead levels for which a lead risk assessment is required under Minnesota Statutes, section 144.9504, subdivision 2.

B. As required by Minnesota Statutes, section 144.99, subdivision 2, a person must allow the commissioner to have access to the work site while the person performs regulated lead work.

C. An individual conducting a lead hazard screen, lead inspection, lead risk assessment, or clearance inspection must be licensed as required by part 4761.1040 and must use the methods described in this part, regardless of whether the work is required by Minnesota Statutes, section 144.9504, or is undertaken voluntarily.

D. A person must provide notice to the commissioner, on a form provided by the commissioner, at least 24 hours before performing a lead hazard screen, a lead inspection, or a lead risk assessment whether or not required by Minnesota Statutes, section 144.9504.

E. An amendment to a notice required under item D must be submitted to the commissioner, on a form provided by the commissioner, as soon as possible but no later than the effective date and time of the amendment.

F. A person must provide notice to the commissioner at least 24 hours before performing a clearance inspection, if the commissioner requests the notice.

G. A notice or amendment required under this subpart must be submitted to the commissioner by mail or facsimile, except that an assessing agency may also provide notice by telephone.

Subp. 2. Methodologies.

A. A lead hazard screen, lead inspection, lead risk assessment, and clearance inspection must be performed according to one of the documented methodologies that include quality control procedures for collection, handling, and analysis of samples to ensure that the sampling and analysis results accurately represent the lead in the affected property.

B. To the extent that the documented methodologies contain numerical standards for the lead content of paint, dust, bare soil, or drinking water that differ from the standards in part 4761.1100, the latter shall govern.

Subp. 3. Required personnel.

A. A lead hazard screen and a lead risk assessment must be performed by a lead risk assessor.

B. A lead inspection and a clearance inspection must be performed by either a lead inspector or a lead risk assessor.

C. Drinking water samples collected as part of a lead risk assessment must be collected by a lead risk assessor. Drinking water samples that are not collected as part of a risk assessment must be collected by either a lead inspector or a lead risk assessor.

Subp. 4. Laboratory analysis. Laboratory analyses of samples of paint, dust, or bare soil must be performed by a laboratory recognized by the United States Environmental Protection Agency under the Toxic Substances Control Act, United States Code, title 15, section 2685, paragraph (b). Analyses of samples of drinking water must be performed by a laboratory certified by the commissioner to analyze lead in water. X-ray fluorescence analyzers may be used for on-site measurement of lead in paint, instead of or in combination with laboratory analysis of paint samples.

Subp. 5. Reports; recordkeeping.

A. Within 30 days of completion, the individual who did a lead hazard screen, lead inspection, lead risk assessment, or clearance inspection must write a report containing the information described in part 4761.1200. The report must be retained for at least three years and must be made available at no cost to the commissioner upon request. Before an individual or firm ceases operations, records of regulated lead work must be deposited with an individual who will maintain the records for the required time and the name and address of the individual must be provided to the commissioner.

B. In lieu of writing a report according to part 4761.1200, an assessing agency must submit for the commissioner's approval standard forms that the assessing agency uses for lead inspections, lead risk assessments, and clearance inspections. Completed forms must be retained for at least three years and must be made available at no cost to the commissioner upon request.

Subp. 6. Dust samples. Dust samples must either be collected from single surfaces or composited from more than one surface. Composite dust sampling must be done as follows:

A. composite dust samples must consist of at least two subsamples;

B. dust from every building component that is being represented by the sample must be included in the composite sample; and

C. composite dust samples must consist of subsamples from only one type of building component but may represent building components in more than one room.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1120 CLEARANCE INSPECTIONS.**Subpart 1. Mandatory lead work.**

A. A clearance inspection must be performed by an assessing agency after lead hazard reduction ordered by the assessing agency. The ordered work is successfully completed after analysis of samples demonstrates that the standards in part 4761.1100 are not exceeded.

B. For both interior and exterior work, a visual determination must be made that no deteriorating paint remains in areas for which an assessing agency ordered lead hazard reduction.

C. After exterior lead hazard reduction, the ground must be free of visible paint chips, whether the ground is covered or bare soil remains. A soil sample must be collected and analyzed if bare soil remains.

D. In a single-family residence, a total of at least three separate dust samples must be collected at least one hour after completion of final cleanup performed after lead hazard reduction ordered by an assessing agency as follows:

MINNESOTA RULES 2001

4761.1120 RESIDENTIAL LEAD ABATEMENT

1284

(1) one dust sample must be collected from one window sill if there is a window within the work area or a composite sample may be collected from sills if there is more than one window in the work area; and

(2) a composite dust sample must be collected that represents at least four rooms, hallways, or stairwells in the following locations or, if less than four rooms, hallways, or stairwells exist, dust samples must be collected from all of the rooms, hallways, and stairwells in the following locations:

(a) the same locations that were sampled in the lead inspection, lead hazard screen, or lead risk assessment and found to exceed a standard in part 4761.1100, except for a sampling location on a building component that was removed; and

(b) the floor immediately outside the entrance through the containment, if any, to the work area.

E. In a building with more than one dwelling unit, a total of at least four dust samples must be collected as follows:

(1) the same locations described in item D; and

(2) common areas that are potentially contaminated by the lead hazard reduction.

F. If lead hazard reduction was performed with a high efficiency particulate air filter but without containment, the number of samples required under items D and E is doubled to a total of at least six composite samples for a single-family residence and eight composite samples for a building with more than one dwelling unit.

Subp. 2. Voluntary lead work. Clearance inspections for voluntary lead hazard reduction must be performed as described in this subpart by a lead risk assessor or by a lead inspector, except that a clearance inspection is not required if a property owner performs voluntary lead hazard reduction on the owner's property.

A. For both interior and exterior work, a visual determination must be made that no deteriorating paint remains in the areas where lead hazard reduction was performed.

B. After exterior lead hazard reduction, the ground must be free of visible paint chips, whether the ground is covered or bare soil remains. A soil sample must be collected and analyzed if bare soil remains.

C. In a single-family residence, a total of at least three separate dust samples must be collected at least one hour after completion of final cleanup performed after lead hazard reduction as follows:

(1) one dust sample must be collected from one window sill if there is a window within the work area or a composite sample may be collected from sills if there is more than one window in the work area; and

(2) a composite dust sample must be collected that represents at least four rooms, hallways, or stairwells in the following locations or, if less than four rooms, hallways, or stairwells exist, dust samples must be collected from all of the rooms, hallways, and stairwells in the following locations:

(a) the same locations that were sampled in the lead inspection, lead hazard screen, or lead risk assessment and found to exceed a standard in part 4761.1100, except for a sampling location on a building component that was removed; and

(b) the floor immediately outside the entrance through the containment, if any, to the work area.

D. In a building with more than one dwelling unit, a total of at least four dust samples must be collected as follows:

(1) the same locations described in item C; and

(2) common areas that are potentially contaminated by the lead hazard reduction.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: 23 SR 1591

4761.1130 MULTISITE, BARE SOIL ANALYSIS.

Subpart 1. **Multisite lead orders.** An assessing agency may undertake the collection and analysis of bare soil samples to determine lead contamination in an urbanized area. If performed according to the criteria in subpart 2, and if at least 25 percent of the soil samples have lead concentrations that exceed the standard in part 4761.1100, subpart 3, the assessing agency may issue lead orders for bare soil for any subsequent lead risk assessments in the area without further sampling and analysis of soil unless the property owner requests that soil sampling be performed before the issuance of a lead order.

Subp. 2. **Sampling criteria.** An assessing agency must collect and analyze bare soil samples according to this subpart:

A. The area must be in a standard metropolitan statistical area and must be no greater than a census tract.

B. A map of the area must be prepared that shows the location of residences, boulevards, streets, alleys, schools, playgrounds, and all areas of bare soil.

C. Twelve samples must be collected from within three feet of foundations and separate composite samples must be collected from areas in residential yards in which children play.

D. A soil sample collected must be one centimeter in depth and must include the soil surface.

E. A standard soil sampling tube or a putty knife is an acceptable sampling tool. The sampling tool must be cleaned before each use.

F. Soil samples must be labeled with the date, street address, city or township, county, census tract number, name of the individual doing the sampling, and soil sample location.

G. An assessing agency must notify the commissioner within 30 days of the census tracts determined to meet the criteria in subpart 1.

H. An assessing agency must prepare a report describing how and where the samples were collected and must provide a copy of the report at no cost to the commissioner upon request. The assessing agency must retain the report for as long as it is the basis for issuing lead orders without additional soil sampling.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: 23 SR 1591

4761.1140 LEAD HAZARD SCREEN.

Subpart 1. **Applicability.** A lead hazard screen may be performed voluntarily in residences and child-occupied facilities but must be performed by a lead risk assessor. If a lead hazard screen identifies dust lead levels that exceed the standards in part 4761.1100, subpart 2, the lead risk assessor must inform the property owner that a lead risk assessment is recommended by the commissioner of health.

Subp. 2. **Methods.**

A. If performed, a lead hazard screen must satisfy the requirements of part 4761.1110 and must include:

(1) identification of the areas within the affected property that are used by a child and in which a child is most likely to be exposed to a potential source of lead;

(2) visual identification of the location of any deteriorated paint present and the location of at least three dust sampling locations;

MINNESOTA RULES 2001

4761.1140 RESIDENTIAL LEAD ABATEMENT

1286

(3) collection and analysis of at least one composite dust sample from hard-surfaced floors, window sills, and window wells, or collection of single-surface dust samples from each of these surfaces that have paint that appears to differ in color, age, or texture;

(4) in common areas of buildings with more than one dwelling unit, collection and analysis of additional composite dust samples from surfaces accessible to a child; and

(5) visual identification of the presence and location of bare soil if the ground is not covered by snow at the time of the lead hazard screen.

B. Collection and analysis of drinking water is not required but may be performed as part of a lead hazard screen.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1150 LEAD INSPECTION.

Subpart 1. **Applicability.** A lead inspection may be performed voluntarily in residences and child-occupied facilities but must be performed by either a lead inspector or lead risk assessor according to the methods described in subpart 2.

Subp. 2. Methods.

A. If performed, a lead inspection must satisfy the requirements of part 4761.1110 and must include:

(1) x-ray fluorescence analysis or collection and laboratory analysis of a sample of deteriorated paint from each interior and exterior building component that has paint that appears to differ in color, age, or texture, unless the component was replaced after 1978;

(2) in common areas of buildings with more than one dwelling unit, x-ray fluorescence analysis or collection and laboratory analysis of a sample of deteriorated paint, if any, from each interior and exterior building component that has paint that appears to differ in color, age, or texture, unless the component was replaced after 1978; and

(3) visual identification of the presence and location of bare soil if the ground is not covered by snow at the time of the inspection.

B. Collection and analysis of drinking water is not required but may be performed as part of a lead inspection.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1160 LEAD RISK ASSESSMENT.

Subpart 1. **Applicability.** Whether mandated by statute or performed voluntarily, a lead risk assessment must be performed by a lead risk assessor using the methods described in subpart 2. An assessing agency that is required by Minnesota Statutes, section 144.9504, to respond to reports of blood lead levels in children and pregnant woman must use the methods for lead risk assessment in this part and must issue lead orders to the property owner based on the agency's findings. A lead risk assessment is not required to include sampling and analysis of paint in affected property built in 1978 or later.

Subp. 2. Methods.

A. A lead risk assessment must satisfy the requirements of part 4761.1110 and must include:

(1) on-site x-ray fluorescence analysis or collection and laboratory analysis of a sample of deteriorated paint from each interior and exterior building component that has paint that appears to differ in color, age, or texture, unless the component was replaced after 1978;

MINNESOTA RULES 2001

1287

RESIDENTIAL LEAD ABATEMENT 4761.1170

(2) in common areas of multifamily residences, on-site x-ray fluorescence analysis or collection and laboratory analysis of a sample of deteriorated paint, if any, from each interior and exterior building component that has paint that appears to differ in color, age, or texture, unless the component was replaced after 1978;

(3) collection and analysis of at least one composite bare soil sample within three feet of the foundation and a separate composite sample from an area in which children play, if these locations contain bare soil;

(4) collection of dust samples from the window sills and wells and from the floor shall be collected in all living areas where a child or pregnant woman is most likely to come into contact with dust; and

(5) collection of dust samples from window sills and wells and from floors in common areas of buildings with more than one dwelling unit and child-occupied facilities where the risk assessor determines that a child or pregnant woman is likely to come into contact with dust.

B. Collection and analysis of bare soil samples may be delayed if the ground is covered by snow during the original lead risk assessment.

C. Collection and analysis of drinking water is not required but may be performed as part of a lead risk assessment.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1170 GENERAL REQUIREMENTS FOR LEAD HAZARD REDUCTION.

Subpart 1. General requirements.

A. As required by Minnesota Statutes, section 144.99, subdivision 2, a person must allow the commissioner to have access to a work site while the person performs regulated lead work.

B. Lead hazard reduction, including abatement, swab team services, and subsequent cleanup in affected properties, must be performed according to the methods described in this part, whether the work is required by Minnesota Statutes, section 144.9504, or is undertaken voluntarily.

C. Warning signs required under this part must use lettering that is not less than 0.5 inches in height for signs posted inside of a structure and must use lettering that is not less than 1.5 inches in height for signs posted outside of a structure. Signs must plainly warn individuals that lead hazard reduction work is in progress and not to enter.

Subp. 2. **Lead supervisor.** A lead supervisor must be assigned to each project and must be present during work site preparation and final cleanup. A lead supervisor must be able to be immediately contacted and must be able to be present at the work site within two hours after being contacted. At least one lead worker at the site must be able to immediately contact the supervisor.

Subp. 3. Notification.

A. A lead supervisor must notify the commissioner and submit the work plan required by Minnesota Statutes, section 144.9505, subdivisions 4 and 5, on forms provided by the commissioner in writing at least five working days before commencing lead hazard reduction, whether the work is ordered or voluntary. The notice must also be provided to the assessing agency if the lead hazard reduction was ordered by an assessing agency.

B. As required under Minnesota Statutes, sections 144.9503, subdivision 6, and 144.9504, subdivision 8, a property owner who intends to personally perform lead hazard reduction in the owner's property must provide a work plan to the commissioner, on a form provided by the commissioner, at least ten working days before commencing voluntary lead hazard reduction and must provide a work plan and obtain approval from the commissioner before commencing mandatory lead hazard reduction.

MINNESOTA RULES 2001

4761.1170 RESIDENTIAL LEAD ABATEMENT

1288

C. Notice to the commissioner is not required for swab team services ordered by an assessing agency.

D. A person must notify the commissioner on a form provided by the commissioner within 30 days after completing a lead project design.

Subp. 4. **Occupant protection plan.** Except for a structure that is completely unoccupied while regulated lead work is performed, a lead supervisor or lead project designer must prepare an occupant protection plan that is specific to the affected property and that describes the measures to be taken to protect the occupants from lead exposure during the regulated lead work. The lead supervisor must inform the lead workers at the work site of the occupant protection plan, which must be available at the work site and, on request, must be shown to a representative of the commissioner or of the assessing agency with jurisdiction at the lead work site.

Subp. 5. **Record retention.** A report or plan required under parts 4761.1000 to 4761.1220 must be retained by the certified firm or licensed individual who prepared the report or plan for at least three years. The certified firm or licensed individual must provide copies of the report or plan to the person who contracted for the services.

Subp. 6. **Debris storage.** All lead-containing debris generated by lead hazard reduction or swab team services must be stored as it is generated in a closed container or in sealed plastic bags of at least six mil or equivalent thickness. Containers for lead-containing debris that are left on site overnight must be stored in a locked or secure area at the end of each day.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1180 RESTRICTED METHODS FOR LEAD HAZARD REDUCTION.

Subpart 1. **Restricted methods.** The lead hazard reduction work practices in items A to H are restricted as described.

A. Open-flame burning or torching is prohibited.

B. Heat guns operating at more than 700 degrees Fahrenheit are prohibited.

C. Chemical strippers containing methylene chloride are prohibited.

D. All powered-machine methods are prohibited unless the resulting dust is immediately captured by high efficiency particulate air filters.

E. Dry scraping, dry sanding, and dry wire brushing are prohibited except for removing defective paint around electrical outlets, electrical fixtures, or other areas totaling no more than:

(1) two square feet in any one room;

(2) 20 square feet on exterior surfaces; or

(3) ten percent of the surface area of trim around doors and windows or other small building components.

F. Dry sweeping is prohibited.

G. Dry vacuum cleaning is prohibited unless a high efficiency particulate air filter vacuum cleaner is used.

H. Wet/dry vacuum cleaners may be used only to collect wash and rinse water and may not be used to vacuum dry surfaces.

Subp. 2. **Encapsulation methods.** Materials to be used for encapsulation of lead-based paint must first be permitted by the commissioner according to items A to D.

A. The manufacturer of the encapsulant material must provide:

(1) a written, 20-year warranty for any defects in the encapsulant material;

(2) a recommended maintenance plan for the encapsulant; and

(3) documentation that the material has been determined by an independent laboratory to meet the criteria of the American Society for Testing and Materials,

Standard Specification for Non-Reinforced Liquid Coating Encapsulation Products for Leaded Paint in Buildings (E 1795 - 96) (May 1996), Standard Specification for Reinforced Liquid Coating Encapsulation Products for Leaded Paint in Buildings (E 1797 - 96) (May 1996), and Standard Guide for Selection and Use of Liquid Coating Encapsulation Products for Leaded Paint in Buildings (E 1796 - 96) (May 1996). The criteria are incorporated by reference, are not subject to frequent change, and are available through the Minitex interlibrary loan system.

B. A lead risk assessor must verify that the surface to be encapsulated and the encapsulant successfully pass the patch and adhesion tests described in United States Department of Housing and Urban Development, Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, chapter 13, part VI (June 1995). The guidelines are incorporated by reference, are not subject to frequent change, and are available through the Minitex interlibrary loan system. The property owner or lead supervisor is responsible for determining that the surface to be encapsulated is structurally sound, is not a surface subject to friction or impact in normal usage, and will support the application of an encapsulant. Preparation of a surface for the patch and adhesion tests does not constitute lead hazard reduction. The property owner or lead supervisor must notify the commissioner, on a form provided by the commissioner, of the location of the tests to be done 48 hours before performing the patch and adhesion tests.

C. Notwithstanding that a material satisfies the criteria in items A and B, the commissioner may attach conditions to a permit that the commissioner determines are needed to protect public health, safety, or the environment.

D. The commissioner shall review a permit application for compliance with this subpart. The commissioner shall notify a permit applicant of any reasons for denial of a permit.

Subp. 3. Abrasive and water blasting methods.

A. Abrasive blasting, modified-wet abrasive blasting, and vacuum blasting must be performed in compliance with parts 7025.0020 to 7025.0080.

B. Interior abrasive blasting and modified-wet abrasive blasting are prohibited, except for radiators and other metal building components, which must be totally enclosed during the blasting. Interior water blasting is prohibited except in masonry or stone basements.

C. Exterior water blasting must be performed in a manner that prevents water and debris from leaving the property and that provides for filtration of dust and debris from the water.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1190 METHODS FOR LEAD HAZARD REDUCTION.

Subpart 1. **Interior dust and small areas of paint.** The methods in items A to I must be used when removing interior dust or disturbing interior painted surfaces of no more than two square feet per room. All work must be completed in one working day.

A. If paint chips are present on the floor in the area where plastic sheeting is to be placed, the floor must first be cleaned using a high efficiency particulate air filter vacuum to remove all visible paint chips.

B. A single layer of plastic sheeting of at least six mil or equivalent thickness must be placed on the floor beneath the work area and extending at least five feet beyond the perimeter of the work area in all directions. The plastic sheeting must be secured to the floor so that no gaps exist.

C. The heating, ventilating, and air conditioning systems to the room must be turned off and any ducts within five feet of the work area must be sealed off with plastic sheeting secured so that no gaps exist.

D. Furniture within five feet of the work area must be removed or completely covered with one layer of plastic sheeting and secured with tape. Personal belongings of the residents within five feet of the work area must be removed.

E. If residents remain in the unit while work is ongoing, they must be provided with lead-safe passage to a bathroom, at least one living area, and entry and egress routes. Unless actually performing regulated lead work, residents must not be allowed in the work area until all work is complete, no visible dust or debris remains in the work areas, and dust samples for clearance inspection are collected.

F. Warning signs must be placed at the entry to rooms where regulated lead work is occurring.

G. Dust must be removed with a high efficiency particulate air filter vacuum followed by a wet wash with detergent. The wet wash must be followed by a rinsing of the surfaces with clear water.

H. All disturbed surfaces and surfaces extending to five feet beyond the perimeter of the work area, including the floor beneath the work area, must be cleaned with a high efficiency particulate air filter vacuum, wet washed with detergent, and cleaned a second time with a high efficiency particulate air filter vacuum.

I. All floors in adjacent areas used as pathways must be cleaned with a high efficiency particulate air filter vacuum.

Subp. 2. **Interior paint; larger areas.** The methods in items A to N must be used when disturbing interior painted surfaces greater than two square feet per room or if work will take more than one working day to complete.

A. If paint chips are present on the floor in the area where plastic sheeting is to be placed, the floor must first be cleaned using a high efficiency particulate air filter vacuum to remove all visible paint chips.

B. Two layers of plastic sheeting of at least six mil or equivalent thickness must be placed over the entire floor in the room where regulated lead work is to be performed. Plastic sheeting must be secured to the perimeter of the room so that no gaps exist between the plastic and the walls.

C. Doorways to the work area must be covered with a barrier made of plastic sheeting to prevent the escape of dust and debris unless the door is secured from inside the work area. If the entire unit is being treated, cleaned, and clearance inspected, the doorways within the unit must be sealed as rooms are cleaned to protect the cleaned rooms from becoming contaminated by work in adjacent rooms.

D. The heating, ventilating, and air conditioning systems to work areas must be turned off and all heating, ventilating, and air conditioning vents sealed with plastic sheeting secured by tape.

E. All furniture and personal belongings of the residents must be removed from the work area. Large items that cannot be removed must be completely covered with one layer of plastic sheeting and secured with tape.

F. If windows or doors are to be treated or replaced from the interior, two layers of six mil or equivalent thickness plastic sheeting must be attached to the exterior wall to cover the window or door.

G. Residents who are not personally performing lead hazard reduction must not be present in the residence while work is ongoing. Residents may return for overnight occupancy when work ceases for the day and cleanup is completed. Residents returning must be provided with lead-safe passage to a bathroom, at least one living area, and entry and egress routes. Residents must not be allowed in the work area until all work is complete, no visible dust or debris remains in the work areas, and a clearance inspection is passed.

H. Overnight barriers to the work area must be locked or firmly secured.

I. Warning signs must be placed at all entries to the building. Signs must remain posted overnight if work is to continue the following day.

J. If work is to resume the next day:

MINNESOTA RULES 2001

1291

RESIDENTIAL LEAD ABATEMENT 4761.1190

(1) the top layer of plastic must be removed from the floor and discarded;

(2) the remaining layer of plastic must be cleaned with a high efficiency particulate air filter vacuum if left in place for the next day. Holes in the plastic must be sealed with tape before a second layer of plastic is applied for the next day's work; and

(3) all floors in adjacent areas used as pathways to the work area must be cleaned with a high efficiency particulate air filter vacuum.

K. When work is completed:

(1) all surfaces in the work area must be cleaned with a high efficiency particulate air filter vacuum, wet washed with a detergent, rinsed with clear water, and cleaned a second time with a high efficiency particulate air filter vacuum;

(2) all floors in adjacent areas used for pathways to the work area must be wet washed and cleaned with a high efficiency particulate air filter vacuum; and

(3) a wet/dry vacuum may be used instead of a high efficiency particulate air filter vacuum, but must be used only to collect wash and rinse water from hard-surfaced floors and may not be used to vacuum a dry surface or carpeting.

L. If windows or doors were treated or replaced and the containment barrier on the exterior was breached, the exterior side of the window or door must be cleaned with detergent.

M. After completion of lead hazard reduction or swab team services, cleanup must be repeated until no visible dust or debris remains and a clearance inspection shows compliance with the standard for lead in dust under part 4761.1100, subpart 2.

N. If composite samples do not demonstrate compliance with the standards in part 4761.1100, all of the surfaces represented in the composite sample must be recleaned until compliance with the standards is demonstrated.

Subp. 3. **Exterior paint.** The methods in items A to N must be used when disturbing exterior painted surfaces.

A. One layer of plastic sheeting of at least six mil or equivalent thickness must be spread on the ground extending at least ten feet beyond the perimeter of the surface being disturbed or extending at least 20 feet if the structure is more than one story in height. Plastic sheeting must extend at least to the property line if the property line is less than ten feet from a one-story structure or is less than 20 feet from a higher structure.

(1) The plastic sheeting must be attached to the side of the building so that no gaps exist between the plastic and the building.

(2) The plastic sheeting must be weighted down.

(3) The edges of the plastic sheeting must be raised to form a catch basin to protect from runoff in the event of precipitation.

(4) Plastic sheeting must be protected from puncture from falling debris, nails, and other objects.

(5) Ladder feet must not puncture the plastic sheeting unless necessary to ensure that the ladder is safely placed in a stable position.

B. All windows and doors in the dwelling must be kept closed. All windows and doors of adjacent buildings that are within 20 feet of the work area must be kept closed.

C. If windows or doors are to be treated or replaced, two layers of plastic sheeting must be attached to the interior wall to cover the window or door.

D. All movable items in the yard must be removed to at least 20 feet from the work area. Items that cannot be moved must be covered with plastic sheeting and secured with tape.

MINNESOTA RULES 2001

4761.1190 RESIDENTIAL LEAD ABATEMENT

1292

E. All bushes and shrubs that are not more than four feet tall and that are within 20 feet of the work area must be covered with plastic sheeting that is secured with tape around the base of the bush or shrub.

F. Work must not be conducted if wind speeds exceed 20 miles per hour.

G. Work must cease and cleanup must occur when rain begins.

H. Residents must not be present in the work area during the work day. Residents may return after daily cleanup is completed.

I. Temporary fencing or barrier tape must be erected at a 20-foot perimeter around the work area to keep out unauthorized persons. The barrier distance may be less if the distance to the property line or sidewalk is less than 20 feet.

J. Warning signs must be posted on the building and at a 20-foot perimeter around the building. The distance may be less if the distance to the property line or sidewalk is less than 20 feet.

K. At the end of a work day, all plastic sheeting on the ground must be picked up in such a manner as to contain all debris that is not removed to storage containers. Plastic sheeting must not be left out overnight.

L. If windows or doors are treated or replaced and the interior containment is breached, the interior must be cleaned following procedures in subpart 1.

M. If the plastic sheeting on the ground is punctured or containment is otherwise breached, the ground must be cleaned of all visible paint debris.

N. All exterior horizontal surfaces that may have been exposed to dust and debris from lead hazard reduction must be cleaned of visible dust and debris and washed with detergent.

Subp. 4. **Soil methods.** The methods in items A to D must be used when disturbing bare soil.

A. Bare soil must be removed to a depth that eliminates visible paint chips or debris, if any is present, unless the soil is to be covered with concrete, asphalt, or other impervious material. The soil newly exposed by removal of surface soil must be covered as specified in item B unless it is tested and found to contain lead in a concentration of less than 100 parts per million. The final surface must provide erosion control.

B. Bare soil that contains lead in a concentration of at least 100 parts per million but less than 5,000 parts per million by weight must be removed or covered as follows:

(1) if soil is to be covered with concrete, asphalt, or other similar, impervious material, the soil must first be compacted before covering;

(2) if soil is to be covered with sod or other living material, the soil must first be tilled and raked before covering with sod or other living material; or

(3) if soil is to be covered with sand, wood chips, or other nonliving, permeable material, no preparation of the bare soil is required before covering.

The final surface must provide erosion control.

C. Bare soil that contains lead in a concentration of at least 5,000 parts per million must be removed or covered with concrete, asphalt, or other impervious material.

D. The lead concentration in replacement soil, if any is provided, must not exceed 25 parts per million, according to Minnesota Statutes, section 144.9508, subdivision 2, paragraph (c).

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1200 CONTENT OF REPORTS.

Subpart 1. **General requirements.** At a minimum, inspection reports, lead hazard screen reports, risk assessment reports, and clearance inspection reports must contain:

MINNESOTA RULES 2001

1293

RESIDENTIAL LEAD ABATEMENT 4761.1210

- A. the dates that the inspection, lead hazard screen, or risk assessment was performed;
- B. the address of the structure;
- C. the date that the structure was constructed;
- D. the apartment numbers, if applicable;
- E. the name, address, and telephone number of the owner or owners of each structure;
- F. the name, signature, and license number of each lead inspector or lead risk assessor who conducted the inspection, lead hazard screen, or risk assessment;
- G. the name, address, and telephone number of the certified firm employing each lead inspector or lead risk assessor, if applicable;
- H. a statement of the presence and location of visible dust and debris, if any;
- I. the testing methods and devices or sampling procedures employed for analysis of lead content, including quality control data and the brand, model, and serial number of the x-ray fluorescence analyzer, if used;
- J. identification of the specific locations of each component tested for lead;
- K. all analytical results including the units of measurement;
- L. the name, address, and telephone number of each laboratory that conducted sample analysis; and
- M. the results of any other inspections or analyses that were used to determine the presence of lead hazards in the affected property and a description of the methods used.

Subp. 2. **Risk assessment reports.** In addition to the information required in subpart 1, risk assessment reports must also contain:

- A. a description of the location, type, and severity of actual or potential lead hazards;
- B. a description of interim controls or abatement options for each actual or potential lead hazard with recommendations for prioritizing reduction of each lead hazard; and
- C. if the use of an encapsulant or enclosure is recommended, a recommended schedule for maintenance and monitoring, unless the manufacturer of the encapsulant or enclosure provides a recommended schedule for maintenance and monitoring.

Subp. 3. **Lead hazard reduction reports.** A lead supervisor or lead project designer must prepare, and retain for at least three years, a written report for each lead hazard reduction project that includes:

- A. the name, address, and telephone number of each certified firm that participated in the lead hazard reduction project;
- B. the name of each lead supervisor assigned to the project;
- C. the occupant protection plan;
- D. a description of the lead hazard reduction methods used, the work site, and the building components worked on; and
- E. a copy of the clearance inspection report.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

4761.1210 ENFORCEMENT.

The provisions of parts 4761.1000 to 4761.1220 are subject to the provisions of the Health Enforcement Consolidation Act, Minnesota Statutes, sections 144.989 to 144.993.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

MINNESOTA RULES 2001

4761.1220 RESIDENTIAL LEAD ABATEMENT

1294

4761.1220 VARIANCES.

Except for the numerical standards for the concentrations of lead in paint, dust, bare soil, and drinking water in part 4761.1100, a variance from a provision in parts 4761.1000 to 4761.1210 may be requested according to the procedures in parts 4717.7000 to 4717.7050.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*

LEAD-SAFE HOUSING

4761.1230 LEAD-SAFE CERTIFICATION OF HOUSING.

Subpart 1. **Conditions.** To be certified as lead-safe, a residence must satisfy the conditions in Minnesota Statutes, section 144.9511, subdivision 2.

Subp. 2. **Lead hazard screen required.** To obtain certification that a residence is lead-safe, the property owner must have a licensed lead risk assessor conduct a lead hazard screen of the property. The lead risk assessor must complete a property condition report on a form provided by the commissioner.

Subp. 3. **Filing.** The property owner must complete a filing form provided by the commissioner and submit the property condition report and a filing fee of \$5 to the commissioner.

Subp. 4. **Expiration.** Lead-safe certification is valid for one year from the date that the property condition report was completed.

Statutory Authority: *MS s 144.9505 to 144.9508*

History: *23 SR 1591*