

CHAPTER 17**LEAD HAZARD EVALUATION
AND ABATEMENT CODE****Authority**

N.J.S.A. 52:27D-124 and 52:27D-436.

Source and Effective Date

R.1995 d.381, effective July 17, 1995.
See: 27 N.J.R. 970(a), 27 N.J.R. 2715(a).

Executive Order No. 66(1978) Expiration Date

Chapter 17, Lead Hazard Evaluation and Abatement Code, expires on July 17, 2000.

Chapter Historical Note

Chapter 17, Retirement Community Full Disclosure Requirements, was filed and became effective June 1, 1970, as R.1970 d.61. See: 2 N.J.R. 38(b), 2 N.J.R. 53(b). An exempt emergency rule was filed and became effective April 22, 1976, as R.1976 d.126. See: 8 N.J.R. 270(b). Pursuant to Executive Order No. 66(1978), Chapter 17 was readopted with amendments, effective June 27, 1984, as R.1984 d.300. (Amendments effective July 16, 1984.) See: 16 N.J.R. 1137(b), 16 N.J.R. 1968(a). Chapter 17 was repealed, effective June 19, 1989, as R.1989 d.317. See: 21 N.J.R. 958(a), 21 N.J.R. 1669(a). Pursuant to the provisions of Executive Order No. 66(1978), Chapter 17 expired, and ceased to be effective, on June 1, 1989. Chapter 17, Lead Hazard Evaluation and Abatement Code, was adopted as New Rules by R.1995 d. 381, effective July 17, 1995. See: Source and Effective Date.

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(a) This chapter, adopted pursuant to P.L. 1993, c.288, Lead-Based Paint Hazard Abatement and Lead-Based Paint Abatement Contractor Certification Act, shall be known and shall be cited throughout the rules as “N.J.A.C. 5:17” and, when referred to in this part of the rules, may be cited as “this chapter.”

(b) Unless otherwise specifically provided, all references to article or section numbers or to provisions not specifically identified by number, shall be construed to refer to such article, section, or provision of this chapter.

(c) This chapter controls the abatement of lead-based paint hazards and the certification of lead-based paint hazard evaluation or abatement contractors.

(d) This chapter seeks to provide and ensure public safety, health, and welfare insofar as they are affected by the identification and abatement of lead-based paint hazards. It is not intended to, nor shall it be construed to, conflict with or limit the applicability of the lead exposure in construction standards promulgated by the Occupational Safety and Health Administration (OSHA), 29 C.F.R. 1926.62.

(e) The removal, repair, encapsulation, or enclosure of the lead-based paint or lead-contaminated soil shall require a construction permit issued pursuant to the State Uniform Construction Code Act (N.J.S.A. 52:27D-119 et seq.). Any encapsulation or enclosure materials or methods shall conform to the construction requirements of the Uniform Construction Code (UCC) except that there shall be no requirement to increase the size of door or window openings.

(f) The Departments of Health and Labor, pursuant to P.L. 1993, c.288, and agreements between the Departments, shall share information about certifications and abatements pursuant to this Chapter.

1. In instances in which a child with an elevated blood lead level is identified pursuant to Chapter XIII of the State Sanitary Code (N.J.A.C. 8:51), that code shall control inspection, risk assessment and abatement of premises identified as contributing to the elevated blood lead level.

5:17-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

“ASTM” means the American Society for Testing and Materials.

“Business firm” means and includes any corporation, company, association, society, firm, partnership or joint stock company, or any sole proprietor, engaged in, advertising, or holding itself out to be in the business of lead evaluation or lead abatement.

“Commissioner” means the Commissioner of the Department of Community Affairs.

“Composite sampling” means an economical, but less specific, method of sampling for lead-based paint hazards by analyzing dust from several surfaces or soil from different locations together.

“Department” means the Department of Community Affairs.

“Encapsulant” means a coating or rigid material that relies on adhesion to a lead-based painted surface and is not mechanically fastened to the substrate.

“Encapsulation” means a process to make lead-based paint inaccessible by providing a barrier between the lead-based paint and the environment, where the primary means of attachment for the encapsulant is bonding of the product used to the surface covered either by the product itself or through the use of an adhesive.

“Enclosure” means the installation of a rigid, durable barrier that is mechanically attached to building components, with all edges and seams sealed with caulk or other sealant and having a design life of at least 20 years.

“HUD Guidelines” means the most recent version of the “Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing” prepared for the United States Department of Housing and Urban Development by the National Center for Lead-Safe Housing and available from the National Center, 10227 Wincopin Circle, Suite 205, Columbia, Maryland 21044.

“HEPA” means high efficiency particulate air.

“HEPA sander” means an electric sander equipped with a specially designed shroud or containment system where all exhaust air is passed through a HEPA filter.

“HEPA vacuum blasting” means abrasive blasting with a shroud under the vacuum that is attached to the blast head where all exhaust air is passed through a HEPA filter.

“HEPA vacuum needle gun” means a needle gun that removes paint by the force of metal needles rapidly pounding against the painted surface attached to a vacuum where all exhaust air is passed through a HEPA filter.

“Inspector/risk assessor” means a person certified by the New Jersey Department of Health as such.

“Lead abatement” means a process designed either to mitigate or to eliminate permanently lead-based paint hazards on a premises and includes, but is not limited to: the removal of lead-based paint and lead-contaminated dust; the containment or encapsulation of lead-based paint; the replacement of lead-painted surfaces or fixtures; the removal or covering of lead-contaminated soil; and all preparation, cleanup, disposal and post-abatement clearance testing activities associated with such measures.

“Lead abatement clearance certificate” means the certificate issued by the construction official pursuant to N.J.A.C. 5:23-2.23(m) at the end of a lead abatement project.

“Lead evaluation” means a surface-by-surface investigation to determine the presence and condition of lead-based paint and the provision of a report explaining the results of the investigation, including, but not limited to, hazards found and recommendations for abatement.

“Lead screening” means an abbreviated lead-based paint hazard evaluation which may be appropriate for buildings constructed before 1978 that are in good condition.

“Lead-based paint” means paint or other surface coating material that contains lead equal to or greater than 1.0 milligrams per centimeter squared or in excess of 0.5 percent by weight.

“Lead-based paint hazard” means any condition that causes exposure to lead from lead-contaminated dust or soil or lead-contaminated paint that is deteriorated or present in surfaces that would result in adverse human health effects.

“N.J.A.C.” means the New Jersey Administrative Code.

"N.L.L.A.P." means the U.S. Environmental Protection Agency National Lead Laboratory Accreditation Program.

"Owner" means building owner or his agent. In the case of evaluation and testing services, "owner" shall include the client of the evaluation firm if other than the owner.

"Patch test" means a field test procedure in which a small area of the existing lead-based paint film is prepared and the encapsulant product is applied or installed and cured in the manner intended for the large-scale job and then tested to determine adhesion and surface integrity.

"Plastic sheeting" means a minimum of six mil thick polyethylene (plastic) sheeting unless the text specifies otherwise.

"Surface" means an area such as an interior or exterior wall, ceiling, floor, door, door frame, window sill, window frame, porch, stair, handrail and spindle, or other abradable surface, soil, furniture, a carpet, a radiator or a water pipe.

"UCC" means the New Jersey Uniform Construction Code, N.J.A.C. 5:23.

"ug" means micrograms of lead per.

"Window" means the entire window system, including the sash, the stop and parting beads, and the window jambs.

"Window well" means the window trough. It is also synonymous with window stool, defined in ASTM Standards E1605-94 as flat, horizontal molding fitted over the sill, on the window interior, between jambs, that comes in contact with the bottom rail of the (lower) operating sash and the window sill.

"XRF" means x-ray fluorescence, a radiological method of in-place testing for the presence of lead-based paint on surfaces.

5:17-1.3 Resource materials

Additional information on evaluating and abating lead hazards may be obtained from the following sources: American Society for Testing Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103; The National Center for Lead-Safe Housing, 10227 Wincopin Circle, Suite 205, Columbia, Maryland 21044, (410) 992-0712; The National Institute of Building Sciences, 1201 L Street, NW, Suite 400, Washington, DC 20005-4024, (202) 289-7800; and the Steel Structures Painting Council, The Crane Building, 40 24th Street, 6th Floor, Pittsburgh, Pennsylvania 15222.

SUBCHAPTER 2. CONTRACTOR CERTIFICATION

5:17-2.1 Certification required

(a) Effective January 1, 1996, no individual, partnership, corporation or other business entity shall engage in either

the business of lead evaluation or the business of lead abatement, unless certified by the Department in accordance with section 15 of P.L. 1993, c.288 (N.J.S.A. 52:27D-428) and these rules.

(b) Any individual, corporation, partnership or other business entity seeking certification in accordance with these rules shall either be certified or shall employ individuals certified by the Department of Health in accordance with section 3 of P.L. 1993, c.288 (N.J.S.A. 26:2Q-3) (see N.J.A.C. 8:62) and shall designate a person, certified as a lead abatement supervisor by the Department of Health, at each job site to be responsible for ensuring compliance with the requirements of P.L. 1993, c.288 and of these rules.

(c) Contractor certification shall not be required for the following individuals or activities;

1. An owner undertaking work on his or her own premises using his or her own employees, provided that those employees are certified by the Department of Health;
2. A homeowner performing lead abatement work himself or herself on a dwelling unit that he or she owns and occupies as a primary place of residence; or
3. Any business firm engaging in painting, woodworking, structural renovation or other indoor or outdoor contracting services that may result in the disturbance of paint, provided that the firm does not hold itself out as certified by the Department or otherwise represent that it has specialized competency to perform lead evaluation or abatement work.

(d) A corporation, partnership or other business entity may be denied certification if any stockholder, director, officer, partner or other person having an economic interest in the organization shall have violated any of the provisions of these rules or been denied certification for cause. This provision shall also apply to any business organization having a parent or subsidiary relationship to any such business organization.

(e) Local health departments or other public agencies performing lead evaluations shall not be required to obtain contractor certification to perform evaluations within their jurisdictions.

5:17-2.2 Conflict of interest

(a) No business firm shall be certified to offer lead evaluation or lead abatement services if any person who is a proprietor, general partner, officer, director, employee, or shareholder or limited partner in the firm is employed as an official or inspector by any agency, public or private, enforcing the State Uniform Construction Code Act or, except as otherwise provided in paragraph(a)2 below, is employed by any public health department or agency in the State of New Jersey.

1. This section shall not apply to the ownership of stock or other investment instrument in any corporation listed on any national stock exchange.

2. Any other provision of this subsection to the contrary notwithstanding, a business firm may be certified to offer lead evaluation services only, despite the fact that a person who is a proprietor, general partner, officer, director, employee, or shareholder or limited partner in the firm is employed by a public health department or agency in the State of New Jersey. In any such case, the business firm shall not engage in the business of lead evaluation within the area of jurisdiction of the public health department or agency by which any such person is employed and shall not have any relationship to any individual or business firm performing lead abatement services.

(b) Any relationship between the individuals or business firm performing lead evaluation services and the individuals or business firm performing lead abatement services at a job site shall be disclosed to the owner in writing.

(c) Except as otherwise provided in paragraph (a)2 above, nothing contained in this section shall be deemed to prevent a business firm from offering both evaluation and abatement services provided that the disclosure required in (b) above is made for any job where that firm performs both evaluation and abatement.

5:17-2.3 Application for certification

(a) Every application for certification as either a lead evaluation contractor or a lead abatement contractor, or both, shall be made on the appropriate form prescribed by the Commissioner and shall be accompanied by a non-returnable fee of \$1,500. In the case of firms seeking certification to perform both evaluation and abatement work, two fees shall be paid.

(b) Every application for certification shall include the following:

1. The full name and address of the business. In the case of a corporation, the name entered on the application shall be the same as that registered with the Secretary of State. In all cases, the address entered on the application shall be the street number, street name, municipality, the post office serving the property, if different from the municipality, and the zip code, of the location of the primary office of the applicant's business organization. In no case shall the address be only the address of an agent or only a post office box. It shall, in all cases, be the address at which the proprietor, or the designated representative of the business organization who is certified by the Department of Health in accordance with section 3 of P.L. 1993, c.288 (N.J.S.A. 26:2Q-3) and is responsible for compliance with P.L. 1993, c.288 can usually be found;

2. The name and address of an agent upon whom service upon the business organization may be made within the State of New Jersey. The agent shall be either an individual who is a resident of the State of New Jersey or a corporation maintaining an office within the State of New Jersey;

3. The business organization's telephone number;

4. The business organization's Federal Taxpayer Identification Number and New Jersey Unemployment Insurance Number, if any;

5. The name, address and home telephone number, and date of birth of each person having at least a 10 percent ownership interest in the business organization;

6. Information concerning the experience of the applicant, and of the person certified by the Department of Health and designated as being responsible for compliance with P.L. 1993, c.288, in the State of New Jersey, including the number of years in the lead evaluation and/or lead abatement business and the municipalities in which such business has been carried on during the three years immediately preceding the date of application;

7. A list of the employees who will be involved in performing evaluation or abatement tasks, together with their New Jersey Department of Health Certification Number and the discipline(s) in which they are certified;

8. Any criminal convictions against the business or against any person having an interest in the business and the disposition thereof; and

9. Proof of insurance as follows: a minimum of \$1 million in commercial general liability coverage written on an occurrence basis without a sunset clause or provision by an entity admitted or otherwise approved to write policies in New Jersey by the New Jersey Department of Insurance and with an "A" or better rating from A.M. Best. Insurance coverage meeting this requirement shall be in effect during the entire time that a contractor remains certified and cannot be allowed to lapse.

i. For purposes of submitting the application for certification, a copy of the policy cover sheet showing the contractor name, the policy number, the effective dates, the amount of coverage and the name of the entity issuing the policy shall be accepted as proof of insurance.

(c) Each applicant for certification shall disclose in the application any relationship with any other business organization engaged in lead evaluation and/or lead abatement or in the supply of goods, services or materials for lead evaluation or abatement or in any other work for which a permit is required pursuant to the Uniform Construction Code, N.J.A.C. 5:23, and shall further disclose all interests of any officer, partner, director, shareholder or employee in any other business organization engaged in lead evaluation and/or lead abatement or in the supply of goods, services or materials for lead evaluation or abatement or in any other work for which a permit is required pursuant to the Uniform Construction Code, N.J.A.C. 5:23.

(c) Dust wipe sampling shall be done as per the HUD Guidelines, referenced in N.J.A.C. 5:17-3.3(d).

1. Wipe samples shall be submitted for laboratory analysis with field spike control samples, as per N.J.A.C. 5:17-3.3(d).

2. Before submitting wipe samples to an NLLAP laboratory, an inspector/risk assessor shall ensure that the wipes chosen are acceptable to the laboratory and that the wipes are appropriately containerized in secure rinsable containers acceptable to the laboratory.

(d) Sampling in individual residential units shall be performed as follows:

1. Single samples for one residential unit shall be taken from: an entry way/porch, the room in which children, if present, most frequently play, children's bedroom(s), kitchen and bathroom(s).

2. Samples in selected areas shall be taken at: areas on floors near friction or impact areas, on interior or exterior window sills of often opened windows and near cabinets in bathrooms or near kitchen utensils.

3. Composite samples may be used provided that the inspector/risk assessor follows the most recent HUD Guidelines and this methodology is disclosed, in writing, to the owner and to occupants. Composite samples shall be sent to an NLLAP laboratory or an equivalent independent national accreditation program. The laboratory shall be notified and results shall be properly recorded and identified as from composite samples. In composite sampling, each surface area sampled shall be approximately the same size. Wipes shall not be re-used. Composite samples shall not combine: interior and exterior samples, samples from carpeting and hard flooring, samples from different components, or samples from different residential units.

4. Composite samples for one residential unit shall be taken at three or four locations (as applicable), representing: interior window sills, exterior window sills, hard flooring and carpeting, if present.

(e) Sampling in multi-family dwellings shall be performed as follows:

1. In addition to the samples listed in (d) above, for multi-family residences, where there are common areas, two dust samples from high traffic floor areas and two window sill (exterior, if possible) samples from common areas shall be taken. In rooms or areas in excess of 2,000 square feet, an additional window sill sample, if possible, and an additional floor sample shall be taken. For every additional 2,000 square feet, there shall be one more window sill sample and one more floor sample.

2. In multi-family residences less than four stories, one entry area floor sample and one sample from a first floor common area and from the sill of an operable

window shall be taken. If there are more than four stories, on every fourth floor, two floor dust samples, a window sill sample and samples from every fourth set of stair treads and every fourth stair landing shall be collected.

(f) Paint chip analysis shall be performed by an inspector/risk assessor according to the HUD Guidelines referenced in N.J.A.C. 5:17-3.3(d) above.

1. Because paint chip sampling can itself release dust, sampling time and location shall be specifically disclosed to the owner and to any occupants.

2. Occupants shall not be present at the site of chip sampling.

3. Samples shall consist of all layers of paint without any substrate included.

i. Exception to (d)3 above: Some substrate may be included if the results are reported in micrograms per square centimeter.

4. Paint samples should not be removed from surfaces which show fresh evidence of chewing or from surfaces which are accessible to children. An inspector/risk assessor shall devise a method to test these surfaces in a non-destructive way, either from an existing chip or from a similar inaccessible location on the surface to be tested. An XRF test may be used if there is sufficient surface area intact.

(g) An inspector/risk assessor or an owner or occupant may use chemical spot tests for initial pre-tests; however, chemical spot tests shall not form the basis of any screening, testing or evaluation or abatement activity performed under this chapter.

(h) Anodic stripping voltammetry (ASV) may be used to test surfaces in accordance with manufacturer's recommendations and any applicable Federal protocols that may be developed.

(i) Any other test methods may be used if documentation is first submitted to the Department, and the Department, based on test data or acceptance by a Federal authority, approves the method for use.

5:17-3.5 Lead hazards

(a) The following lead dust levels indicate lead hazards for which the inspector/risk assessor shall recommend abatement and maintenance options:

1. Floors—in excess of 100 ug/square foot;

2. Interior window sills—in excess of 500 ug/square foot;

3. Exterior window sills (including the window wells)—in excess of 800 ug/square foot.

(b) The following lead dust levels resulting from a lead screening shall indicate that a full evaluation shall be recommended in the report produced by the inspector/risk assessor:

1. Floor wipes in excess of 50 ug/square foot; or
2. Window sill wipes in excess of 400 ug/square foot; or
3. Window trough wipes in excess of 1,500 ug/square foot.

(c) In addition, the inspector/risk assessor may recommend other maintenance, soil, water or air testing and remediation methods to abate soil, water, or other sources of contamination; testing, cleaning or removing furniture or other contents of structures where contamination is suspected; further or later testing and re-evaluation of certain areas. The inspector/risk assessor may identify some areas as safe from lead hazards only for a limited time or only if certain scheduled maintenance activities are timely performed.

SUBCHAPTER 4. PRE-ABATEMENT PREPARATION AND OCCUPANT PROTECTION

5:17-4.1 Specification and drawing

(a) Prior to the commencement of any lead abatement project, the owner shall consent in writing to the scope of the project and to the methods to be employed during the abatement.

(b) A sketch plan of the abatement site shall be prepared and made available to the owner and to any occupants who shall remain in the structure during abatement. The sketch plan shall clearly show:

1. Work areas, labeled to show all surfaces to be abated, which shall not be accessible to occupants;
2. Barriers, if any, which separate the work area from occupied areas;
3. Occupied areas, including bathroom facilities with a route of access to these facilities, and emergency egress route(s), if occupants are to be present during abatement;
4. Workers' changing, handwashing and/or shower, toileting and eating areas;
5. Waste disposal route;
6. Waste storage area or dumpster if abatement will require more than one day;
7. Location of any special equipment; and

8. Any other information which occupants or the contractor would need to know to ensure safe and responsible activity during the abatement.

(c) Prior to any abatement, the occupants shall be relocated, if required, and they shall be supplied with information about lead hazards and about the abatement work being performed.

1. For limited abatements, during which occupants' safe access to bathroom facilities and emergency egress routes remains uninterrupted, occupants shall be given lead hazard information.

2. For all abatements, occupants shall be instructed how to remove, wrap, and secure personal belongings including furniture, appliances, carpeting, draperies and other items which require relocation or protection during the abatement.

(d) Prior to an abatement, the owner shall correct all structural deficiencies affecting the work area.

(e) The entire work area shall be HEPA vacuumed to remove existing dust, paint chips and debris.

(f) When waste shall be left at a site overnight, a secure area such as a plastic-lined room or area or a locked dumpster shall be set aside for this purpose.

5:17-4.2 Abatement classification

(a) An abatement shall be classified as an interior or exterior worksite.

(b) Interior worksites shall be classified as Level 1, 2, 3 or 4, as described in N.J.A.C. 5:17-4.3(c), based on typical applications, time limit for the abatement, resident location, barrier system, warning signs, ventilation systems, furniture, clean up requirements and dust sampling.

(c) Exterior worksites shall be classified as Level 1, 2 or 3, as described in N.J.A.C. 5:17-4.3(c), based on typical applications, time limit for the abatement, resident location, barrier systems, playground considerations, security, signs, weather, clean up and porches.

(d) Contractors shall follow the procedures specified in N.J.A.C. 5:17-4.3(c).

5:17-4.3 Worksite levels

(a) Each lead abatement shall be designated as one or more of the following:

1. Interior worksite, preparation Level 1, 2, 3 or 4;
2. Exterior worksite, preparation Level 1, 2 or 3; or
3. Window treatment or replacement preparation.

2. The condition of existing paint films shall be assessed by performing a visual evaluation, checking for surface deterioration and determining interfacial and other film integrity properties. Standard ASTM procedures shall be used to rate the degree of these conditions.

(c) Patch tests shall be performed for each surface preparation procedure and encapsulant. A successful patch test of the surface preparation and the encapsulant on the surface to which it will be applied shall be made before an encapsulant is applied to a surface.

1. For liquid-applied systems, the patch size shall be six inches by six inches. The area prepared for the patch test shall be at least two inches larger in each direction than the area to be encapsulated.

i. Three inch by three inch patches may be used for fiber-reinforced wall covering and for areas where the shape of the component makes use of a larger test patch impossible.

2. At least one test patch shall be applied to each type of component in each room where the encapsulant is to be used.

3. A logbook shall be kept documenting the location, application method, wet film thickness, if appropriate, and environmental conditions (temperature and relative humidity) for each patch test.

4. A visual evaluation of each patch test shall be performed and the results recorded in the logbook. The encapsulant coating shall be inspected for wrinkling, blistering, cracking, cratering, or bubbling.

5. An adhesive evaluation of each patch test shall be performed using one of the following three methods and the results recorded in the logbook.

i. "X"-Cut Method:

(1) Using a sharp cutting tool, an "X" shall be inscribed in the center of the patch after the encapsulant system has cured according to the manufacturer's recommendations. Each cut line shall be one and one-half inches to two inches long and shall be made through all layers down to the substrate.

(2) If the cut does not go through the patch to the base substrate, a second "X" cut shall be made in a different location.

(3) The point of the cutting tool shall be placed at the intersection of the two cut lines and used to attempt to peel or lift the patch from the existing topcoat. If more than a one-half inch square portion or section of the patch can be removed from the existing topcoat, then the encapsulant fails the patch test.

ii. Patch edge method:

(1) A cut shall be made adjacent to the edge of the patch, through as thick a layer of the encapsulant as possible, to the base substrate.

(2) If the cut does not go through the patch to the base substrate, a second cut shall be made in a different location.

(3) The point of the knife shall be placed under the encapsulant at the cut, attempting to peel or lift the patch. If more than a one-half inch square portion or section of the patch can be removed from the existing topcoat, then the encapsulant fails the patch test.

iii. Soundness method:

(1) A three-eighths inch by three inch bead of construction adhesive shall be applied to the central portion of the face of an eight inch square piece of gypsum wallboard. The wallboard shall then be pressed onto the six inch by six inch patch. The curing time recommended by the adhesive manufacturer shall be observed.

(2) An attempt shall be made to pull the wallboard square away from the painted surface. If the paper backing of the wallboard remains on the adhesive on the painted surface, the patch passes the test.

(d) In addition to the other worksite preparation requirements of this chapter, surface preparation shall be performed as follows and shall replicate the surface preparation used for the successful patch test:

1. Surfaces to be encapsulated shall be cleaned with non-sudsy degreasers or other appropriate cleaning products. The surface shall be rinsed thoroughly;

2. Smooth, glossy surfaces shall be roughened as allowed by this chapter to improve adhesion as recommended by the encapsulant manufacturer;

3. Loose paint shall be removed by wet scraping;

4. Exposed base substrates shall be cleaned or prepared for encapsulation as needed; and

5. Any leaks or sources of moisture shall be eliminated. Where nonreinforced coatings are to be used, cracks shall be filled with a caulking, patching, or sealing compound compatible with the encapsulant and the substrate to which it is applied.

(e) Coatings shall be applied following the manufacturer's instructions. Encapsulant application shall be performed as it was for the successful patch test.

1. Environmental conditions shall be as specified in the manufacturer's instructions and shall be as close as possible to the conditions that existed during the successful patch test.

2. Mixing and/or thinning of liquid encapsulants shall be performed in accordance with the manufacturer's directions.

3. Wet film thickness gauges shall be used to ensure that liquid encapsulants are applied according to the manufacturer's recommended thicknesses.

4. The manufacturer's instructions shall be followed for the application of fabric if required with the use of reinforced liquid encapsulants.

(f) Adhesively bonded coverings shall be applied following the manufacturer's instructions. Encapsulant application shall be performed as it was for the successful patch test.

1. Environmental conditions shall be as specified in the manufacturer's instructions and shall be as close as possible to the conditions that existed during the successful patch test.

2. Wherever possible, permanent, clay-based adhesive shall be used.

3. Adhesively bonded floor tile shall be installed according to the manufacturer's instructions.

(g) Following encapsulation and the curing time specified by the manufacturer, all encapsulated surfaces and components shall be visually inspected for signs that the encapsulant is not adhering. If problems are noted, then appropriate corrective measures shall be taken.

(h) In addition to the logbook of patch test results described in (c) above, the following documentation shall be maintained by the contractor and shall be supplied to the building owner and to the occupant if other than the owner. This information shall be made available at the job site upon request of the Department:

1. The type of encapsulant used and product name;
2. The exact location(s) to which encapsulants were applied;
3. The product label and/or a copy of the manufacturer's technical product information;
4. The MSDS for all products used;
5. A description of the procedures followed, including surface preparation, environmental conditions and wet and dry film thickness for liquid encapsulants.
6. The name, address and certification number of the contractor;
7. The date of application; and
8. A recommended schedule for inspection of the encapsulated surfaces for signs of failure.

SUBCHAPTER 7. SOIL

5:17-7.1 Soil interim controls or abatement

(a) An inspector/risk assessor shall fulfill the requirements as described in (b) and (c) below only if any of these conditions exist:

1. A site to be remediated contains bare play areas which are designated play areas or which contain children's play equipment or which areas are commonly used and known to be used by children as play areas;

2. Lead based paint is known or suspected to be on a building exterior and is known or suspected to be a health hazard or source of interior contamination;

3. Soil is known or suspected from prior usage to be contaminated with lead; or

4. The owner requests soil testing.

(b) The inspector/risk assessor shall recommend a soil sampling strategy of at least the following:

1. For a residential yard or playground, a composite sample of no more than 10 sub-samples of bare play areas if there are such areas;

2. A composite sample of no more than 10 sub-samples for a residential, daycare or school building along the building drip line;

3. A sample method to collect the top one-half inch of soil from areas to be sampled, and to include, but not oversample, paint chips or other contaminated debris in the soil; and

4. For sites other than residential, daycare or school uses, the inspector/risk assessor shall work with the owner to recommend an appropriate strategy.

(c) After receiving results of the sampling in (b) above from a qualified NLLAP certified laboratory or an equivalent independent national accreditation program, the inspector/risk assessor shall recommend at least the following interim controls or permanent abatement strategy:

1. Any areas testing more than or equal to 5,000ug/g lead shall be permanently abated by a method such as soil removal or paving; however, this requirement shall not supersede any Federal or State regulation which applies to any designated waste site or industrial area;

2. Any area expected to be used by children testing between 2,000ug/g and 5,000ug/g shall be permanently abated by a method such as paving over or soil removal. Areas where contact by children is unlikely may be treated with interim controls; and

3. Any area expected to be used by children testing between 400ug/g and 2,000ug/g shall be permanently abated as noted in (c)1 or 2 above, or may be subjected to interim controls.

i. Interim controls may include a change in usage pattern by moving play equipment, walkways or the like and planting thorny bushes or other ground cover, or installing fencing or other barriers to prevent use of contaminated areas.

ii. In low traffic areas, live ground cover, such as grass or shrubbery, or other cover such as clean soil, bark, or gravel may be used as an interim control. Clean soil or other cover shall be at least six inches in depth and shall be shown to contain not more than 200ug/g of lead.

iii. A plan for interim controls shall include a maintenance schedule to monitor use and to ensure that plantings and installations remain in place.

SUBCHAPTER 8. ABATEMENT CLEANING (INTERIOR AND EXTERIOR)

5:17-8.1 Post abatement cleaning—interior work areas

(a) To allow the lead dust to settle, post abatement cleaning shall begin no sooner than one hour after the lead hazard abatement project has been completed.

(b) Cleaning shall take place when the abatement project has been completed and before abated surfaces are painted or sealed.

1. Removal of plastic sheeting shall be done as follows:

i. Plastic sheeting used in the abatement area shall be removed first. Plastic sheeting used to isolate the abatement area shall be removed only when all other plastic sheeting has been removed;

ii. Immediately prior to removal, plastic sheeting shall be misted with water to hold down dust. If necessary, to prevent debris from falling on unprotected floors, moistened debris on plastic sheeting covering floors shall be swept toward the middle of the plastic sheeting prior to folding;

iii. Plastic sheeting shall be removed by folding the ends toward the middle to trap any dust residue;

iv. The plastic sheeting shall be placed in double four mil or single six mil plastic bag(s) that are then sealed with duct tape and removed from the project area for disposal; and

v. The plastic sheeting shall be removed in the following order:

(1) Upper level plastic sheeting, such as that on cabinets and counters;

(2) The top layer of the floor plastic sheeting;

(3) Vent cover and doorway plastic sheeting;

(4) Bottom layer of floor plastic sheeting; and

(5) Plastic used to isolate the abatement project.

2. Work clothing and equipment shall be decontaminated as follows:

i. Work clothing shall be placed in a bag. The bag shall be labeled and sealed for transport to a laundry facility equipped to clean lead contaminated clothing or shall be discarded with other project waste;

ii. All tools shall be wiped down with rags or sponges using trisodium phosphate or other detergent solution formulated to bind lead. An original, marked container showing the nature of the formula and any necessary precautions shall be available at the work site. The name of the product used and its manufacturer shall be included in the records retained by the contractor;

iii. Disposable supplies such as mop heads, sponges, and rags shall be sealed and shall be disposed of as allowed by the New Jersey Department of Environmental Protection; and

iv. Durable equipment such as power and hand tools, generators, and vehicles shall be HEPA vacuumed and then washed with a detergent solution as required in (b)2ii above prior to removal from the work site.

3. The abatement area(s) shall be vacuumed with a HEPA vacuum cleaner as follows:

i. HEPA vacuuming shall be sequenced to avoid passing through rooms already cleaned. The entryway shall be vacuumed last; and

ii. In each room, vacuuming shall begin with the ceiling and shall proceed down the walls. Every surface shall be vacuumed including, but not limited to, ceiling, walls, windows, window sills, exterior sills, window wells, doors, heating and air conditioning equipment, fixtures, such as light fixtures, and built-in appliances. Floors shall be the final surface vacuumed.

4. The abatement area(s) shall be wet washed with a detergent solution as required in (b)2ii above prepared in accordance with manufacturer's instructions.

i. In each room, the wet wash process shall begin with the ceiling and work down to the floor following the sequence in (b)3i and ii above.

ii. String mops and mop buckets with wringers are required for wet washing floors. Sponge mops shall not be used.

5. When dry, the abated area(s) shall be HEPA vacuumed again, following the sequence in (b)3i and ii above.

6. As an alternative to the HEPA vacuum, wet wash, HEPA vacuum cycle described in (b)3 above, a HEPA spray cleaner vacuum may be used.

(c) A preliminary visual inspection shall be conducted to ensure that all surfaces described in the scope of work have been abated and that there is no visible lead dust or residue.

1. If the visual inspection is unsatisfactory, the HEPA vacuum, wet wash, HEPA vacuum cycle described in (b)3 through 5 above shall be repeated.

2. If the visual inspection is satisfactory, any other construction work that will disturb lead-based paint surfaces shall be completed.

(d) All abated surfaces, such as walls, ceilings, and wood-work, shall be primed with an appropriate primer. Those areas shall then be painted or stained and sealed. Surfaces subjected to repeated friction, such as window sashes, jambs, sills, and wells, shall be painted with a final coat of high gloss enamel or clear sealer.

1. Surfaces enclosed with vinyl, aluminum coil stock, or other materials that are traditionally not painted, and new replacement components are exempt from this provision.

(e) After the painting or sealing has been completed, a final cleaning of the area is required unless dust clearance tests were already passed prior to painting or sealing. The final cleaning shall follow the HEPA vacuum, wet wash, HEPA vacuum cycle described at (b)3 through 5 above.

1. Surfaces newly painted with latex paint are exempt from the final wet wash. However, those surfaces must be HEPA vacuumed.

5:17-8.2 Post abatement cleaning—exterior work areas

(a) To allow the lead dust to settle, post abatement cleaning shall begin no sooner than one hour after the lead hazard abatement project has been completed.

(b) Cleaning shall take place when the abatement project has been completed and before abated surfaces are painted or sealed.

1. Removal of plastic sheeting shall be done as follows:

i. Immediately prior to removal, plastic sheeting shall be misted with water to hold down dust. If necessary to prevent debris from falling on unprotected ground, moistened debris on plastic sheeting covering floors shall be swept toward the middle of the plastic sheeting prior to folding;

ii. Plastic sheeting shall be removed by folding the ends toward the middle to trap any dust residue; and

iii. The plastic sheeting shall be placed in double four mil or single six mil bag(s) that are then sealed with duct tape and removed from the project area for disposal.

2. Work clothing and equipment shall be decontaminated as follows:

i. Work clothing shall be placed in a bag. The bag shall be labeled and sealed for transport to a laundry facility equipped to clean lead contaminated clothing or shall be discarded with other project waste;

ii. All tools shall be wiped down with rags or sponges using trisodium phosphate or other detergent solution formulated to bind lead. An original, marked container showing the nature of the formula and any necessary precautions shall be available at the work site. The name of the product used and its manufacturer shall be included in the records retained by the contractor;

iii. Disposable supplies shall be sealed and shall be disposed of as allowed by the New Jersey Department of Environmental Protection; and

iv. Durable equipment such as power and hand tools, generators, and vehicles shall be HEPA vacuumed and then washed with a detergent solution as required in (b)2ii above prior to removal from the work site.

(c) A preliminary visual inspection shall be conducted to ensure that all surfaces described in the scope of work have been abated and that there is no visible lead dust or residue.

SUBCHAPTER 9. FINAL INSPECTION AND CLEARANCE TESTING

5:17-9.1 Final inspection and clearance testing

(a) To allow lead dust to settle, the final inspection and clearance testing shall begin no sooner than one hour after the final cleaning is completed.

(b) The final inspection shall consist of a visual inspection to verify that all abated surfaces have been replaced, painted, or sealed, and the collection of environmental samples to ensure that the work area has been effectively cleaned.

1. Wipe samples shall be taken from the abated area, one sample from within 10 feet outside the containment area and one sample from any nearby high traffic area.

2. When an abatement project involves exterior abatement work, soil samples shall be collected around the foundation of the structure and in any play areas that could have been affected by the work. All soil samples shall be composite samples as described in (d) below.

(c) Single surface samples, which shall consist of one sample in a single, hard, rinsable container, shall be required for all abatement projects.

1. Single surface sampling shall follow the methodology at N.J.A.C. 5:17-3.3(d) of this chapter.
2. Single surface sampling shall comply in number and location with Table 9.1 below.

(d) Composite clearance samples, which shall consist of no more than four subsamples in a single container, are allowed for abatement projects where similar lead hazard control treatments were used in multiple rooms of the same dwelling. Composite sampling shall be performed in accordance with N.J.A.C. 5:17-3.4(c).

(e) The following lead dust levels are acceptable for clearance:

1. Floors—100 ug/square foot;
2. Interior window sills—500 ug/square foot; and
3. Window wells, exterior concrete, rough surfaces—800 ug/square foot.

(f) For clearance of exterior abatement projects, soil samples shall be compared with samples taken prior to the abatement project. A statistical analysis, such as, but not

limited to, a paired student T-test, shall be used to determine if the post abatement soil lead level has increased at a statistically significant level (significant at the 95 percent confidence limit) from the preabatement soil lead level.

1. For soil abatement projects, lead in soil shall not exceed 400 ug/g.
2. Random soil sampling is permitted in a multi-family complex of 10 or more buildings with similar lead control activity.

(g) Random sampling is permitted in multifamily buildings with 10 or more dwelling units where the units are similarly configured and have had comparable lead control activity, performed at the same time and using the same abatement contractor. The units to be tested shall not be selected until all abatement activity and cleaning have been completed.

(h) Field spiked samples shall be submitted and analyzed in accordance with the requirements of N.J.A.C. 5:17-3.3(d).

(i) All clearance samples shall be analyzed at a laboratory participating in the NLLAP program or an equivalent independent national accreditation program.

TABLE 9.1
Recommended Minimum Number and Location of Clearance Dust Samples for All Abatement and Interim Control Work

Clearance Category	Category Description	Number and Location of Single-Surface Wipe Samples in Each Area*	Number and Location of Composite Wipe Samples
1	Interior treatments No containment within dwelling	Two dust samples from every room in dwelling (whether treated or untreated): <ul style="list-style-type: none"> • One interior window sill or window trough, alternating between rooms, • One floor AND <ul style="list-style-type: none"> • For common areas, one for every 2,000 ft² of a common area room floor (if present). 	Three composite samples for every batch of four rooms (whether treated or untreated): <ul style="list-style-type: none"> • One floor composite • One interior window sill composite • One window trough composite AND <ul style="list-style-type: none"> • For common areas, one floor subsample for every 2,000 ft² (if present); up to 8,000 ft² can be sampled for each composite.
2	Interior treatments With containment (plastic sheeting as airlock on doors between treated and untreated areas)	Same as Category 1, but only in every <i>treated</i> room AND, One floor sample outside the containment area but within 10 feet of the airlock to determine the effectiveness of the containment system. This extra single-surface sample is recommended in 20 percent of the treated dwellings in multifamily housing and <i>all</i> single-family homes. <ul style="list-style-type: none"> • For Common Areas, one floor sample for every 2,000 ft² and one floor sample outside containment. 	Same as Category 1, but only in every <i>treated</i> room AND, One floor sample outside the containment area but within 10 feet of the airlock to determine the effectiveness of the containment system. (This extra single-surface sample is recommended in 20 percent of the treated dwellings in multifamily housing and <i>all</i> single-family homes.) <ul style="list-style-type: none"> • For Common Areas, one floor subsample for every 2,000 ft² (up to 8,000 ft² for each composite) and one floor sample outside containment.
3	Exterior treatments	Two dust samples as follows: <ul style="list-style-type: none"> • At least one dust sample on a horizontal surface in part of the outdoor living area (e.g., a porch floor or entryway), and • One window trough sample on each floor where exterior work was performed. An additional trough sample should be collected from a few lower floors to determine if troughs below the area were contaminated by the work above. 	Two dust samples as follows: <ul style="list-style-type: none"> • One composite on a horizontal surface in part of the outdoor living area (e.g., a porch floor or entryway), and • One window trough composite for every 4 floors where exterior work was performed, including lower floors where exterior work was not done, if present.

Clearance Category	Category Description	Number and Location of Single-Surface Wipe Samples in Each Area*	Number and Location of Composite Wipe Samples
4	Soil Treatment	One sample from the entryway.	One sample from the entryway.

* A room includes a hallway or a stairway. If no window is present, collect just one floor sample. When a closet is treated, the room to which it is attached should be tested. A closet is not considered to be a separate room.

SOURCE: PRE-PUBLICATION COPY: Guidelines For The Evaluation And Control of Lead-Based Paint Hazards in Housing, The National Center for Lead-Safe Housing, February 1995.

SUBCHAPTER 11. STEEL STRUCTURES
(RESERVED)

SUBCHAPTER 10. WASTE DISPOSAL

5:17-10.1 Waste disposal

Waste disposal shall comply with regulations promulgated by the New Jersey Department of Environmental Protection. The contractor shall record the name of the waste hauler or the site(s) where the waste was taken if the contractor did not use a waste hauler.