

**GUIDANCE FOR LEAD BASED PAINT ABATEMENT
IN HISTORIC PRESERVATION PROJECTS**

In recent years, the presence of lead based paints in older buildings has become an urgent public health issue. While the hazards, methods of detection, and abatement options have become better understood through research and experimentation, procedures for historic preservation projects have lacked written guidance to evaluate abatement projects vis-à-vis the Secretary of the Interior's *Standards for Rehabilitation*.

As a joint project between the Bureau for Historic Preservation and the National Park Service, the attached guidance has been developed to assist in the development of lead abatement proposals for historic buildings. The guidance is not intended to be definitive as State and local regulations vary and abatement requirements differ according to the use to which the historic building is placed. For projects seeking Federal tax benefits, the Secretary of the Interior's *Standards for Rehabilitation* continue to take precedence over other regulations and codes in determining whether a rehabilitation project is consistent with the historic character of the property and, where applicable, the district in which it is located.

Comments and questions regarding this guidance should be directed to the Historical Architect at the Bureau for Historic Preservation (717) 787-0772.

**National Park Service
U.S. Department of the Interior**

Reviewing Preservation Projects with Lead Paint Issues

Introduction. The presence of lead-based paint in buildings poses a clear danger to the health and safety of their users. Over the past several years, a number of articles and studies have appeared in print, documenting the problems associated with lead-based paint. [For a more complete discussion of health hazards, detection and abatement methods, and research sources, see “Preservation Technology Update,” *CRM Bulletin*, 1990, No. 1, pp. 23-30; Historic Buildings and the Lead Paint Hazard (Hartford, CT: Connecticut Historical Commission, 1990); and Historic Buildings and the Lead Paint Hazard Boston, MA: Massachusetts Historical Commission, 1990).] While the hazards, methods of detection, and abatement options are becoming better known, reviewers of historic preservation projects have lacked written guidance to evaluate abatement projects vis-à-vis the Secretary of the Interior’s *Standards for Rehabilitation*.

With greater frequency, rehabilitation projects of historic buildings involve lead paint abatement proposals: how should this work be evaluated? What basic questions should be asked of owners, architects, and their consultants? What data needs to be gathered before an abatement proposal can be reviewed objectively? What are “reasonable” abatement proposals for historic buildings? This paper is intended to provide general guidance to professional staff, both in National Park Service regional offices and State Historic Preservation Offices, who review and evaluate historic preservation projects with lead paint issues.

It is the reviewer’s responsibility to base certification decisions involving lead paint issues on adequate information and documentation. The burden of proof is on the owner to justify the need to abate and explain why lead-based paint cannot be abated using non-destructive techniques.

The following guidance is not intended to be definitive: State and local regulations vary; abatement requirements differ according to the use to which the historic building is placed; and a treatment that may be acceptable for one historic building may not be appropriate in another. The guidance is intended only to suggest an *approach* to reviewing lead abatement proposals. While testing and abatement procedures can add to the cost of a project, it is important that issues of economic feasibility be taken into account only insofar as the work meets the *Standards*. In the final analysis, for projects seeking Federal tax benefits, the Secretary of the Interior’s *Standards for Rehabilitation* take precedence over other regulations and codes in determining whether the rehabilitation project is consistent with the historic character of the property and, where applicable, the district in which it is located.” [36 CFR Part 67.7]

Questions and comments on the usefulness of this guidance should be directed to:

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Reviewing Lead Paint Abatement Proposals. When reviewing a preservation project that proposes lead paint abatement, the first question reviewers should ask is: What is the significance/importance of the finishes and features that are affected? For example, has the interior already been so altered that further alterations are acceptable? Will the removal of historic features and finishes radically change the building's character? If the contaminated features and finishes lack particular architectural or historical importance, an abatement proposal that results in their removal or encapsulation may be acceptable without further inquiry into the details of lead contamination and abatement. If, on the other hand, the features and finishes are character-defining, their retention, in some form, becomes important, and it will be necessary to examine the proposal to abate and to evaluate the reasonableness of the proposed procedures.

Once significance has been established, reviewers should then determine what, if any, Federal, State, or local lead paint *requirements* apply to the particular project. For example, the Lead Poisoning Prevent Act of 1971, is the only Federal law to date that applies to lead-based paint, yet it is limited to projects involving Federally-owned or assisted housing. At present, abatement is not required by law for office or retail use. If destructive abatement procedures, not required by law, are proposed, it is appropriate to question the need for such measures. If local, State or Federal requirements do apply, it is important to understand precisely what the requirements say.

It is also important to understand the wide range of contamination variables in order to determine the precise extent of the contamination. Not all rooms of a building or even all features of a room may be contaminated and therefore may not require the same level or method of treatment. The reviewer should then ask the questions: Is the entire building affected or just the interior? Are all rooms contaminated or just a few? Do all contaminated features need to be abated? Does the abatement proposal respond to differing levels of contamination? For this reason, a report documenting the testing for lead paint and the extent of contamination should be requested. Such reports should have been undertaken by qualified abatement professionals. Although it is not the responsibility of reviewers to check the credentials of abatement professionals, owners should be encouraged to utilize lead detection services which have had experience in working in historic buildings.

For *each* space (i.e., room, area or logical interior subdivision) of *each* building where destructive abatement is being proposed, samples should be taken from the following areas on the interior:

1. Baseboards, door and window trim;
2. Doors (surface of door and one side of the frame on a representative interior door in each area);
3. Walls and ceilings;
4. Miscellaneous trim: paneling, cabinets, crown molding, fireplace mantels, chair rails;
5. Floor (whether painted or not);
6. Window, including sash, casing, and sill;
7. Interior stairs:
Tread, riser, stringer, newel post, railing cap, balustrade;
8. Radiators.

If lead paint is present on the exterior of the building and destructive abatement measures are proposed, samples should be taken from the following areas:

1. Exterior walls;
2. Window and door trim; fascia boards and other decorative features;
3. Doors;
4. Porch floors and ceilings, railings, balusters, and newel posts;
5. Stairs, as described in #7 above.

If direct-reading x-ray fluorescence analyzers (XRFs) are used for testing, three readings taken at each station are usually needed to ensure accuracy. The report should clearly specify which portions of the building are contaminated and to what degree.

Once the extent of contamination has been established, the reviewer should next assess the method of abatement proposed. Reviewers should question project managers/owners on what abatement alternatives were considered. Were other less destructive procedures considered?

Will the recommended abatement procedure result in the maximum retention of historic features and finishes?

If the need for lead paint abatement can be clearly demonstrated and if the features and finishes are important to the preservation of the property's historic character, the following abatement techniques should be pursued in order of preference (from most desirable/least damaging to least desirable/destructive). The Secretary's Standards state that "the removal of historic materials...that characterize a property shall be avoided" (Standard 2) and "...physical treatments...that cause damage to historic materials shall not be used." (Standard 7):

1. Removal of lead from architectural features in situ using safe methods that do not put lead dust/residue in the air);
2. Removal of architectural features from the building and removal of lead off-site; replacement of features in their original locations;
3. Containment/encapsulation of features using the least destructive methods (laminating, without studs or strapping, lead-contaminated flat plaster with sheet rock, for example);
4. Removal of contaminated features and replacement with in-kind replications.

If features and finishes are not important to the preservation of the property's historic character, removal of contaminated features without replacement in-kind is acceptable.

Present investigation of abatement techniques has begun to show that some procedures are more successful than others in removing lead. Interior sandblasting, for example, is highly undesirable from an abatement perspective. It has been shown to worsen, rather than abate, lead contamination through the introduction of lead dust into the general environment. Nevertheless, certain jurisdictions consider sandblasting and other abrasive techniques to be in compliance with abatement regulations. The fact that these techniques are unlikely to accomplish abatement purposes strongly suggests that they should be discouraged even if approvable according to the "Standards."

Testing of the features will occur again after the initial abatement measures have been taken. If lead is still present in unacceptable amounts, harsher, more destructive abatement techniques may be proposed to meet local, State, or Federal requirements. In that event it must be fully established that:

1. lead retention was not due to faulty abatement techniques (e.g., improper dipping or on-site paint removal or inadequate post-abatement clean-up);

2. lead retention poses a genuine hazard (i.e., residual contamination is documented to be above regulated levels; residual contamination is reasonably accessible to building occupants).

Any new, more intensive abatement proposal must then be evaluated in the same manner as the original proposal.

In general, when lead-based paint is present on flat plaster walls and ceilings, encapsulating these features with dry wall/sheet rock may be considered appropriate from a preservation perspective. When lead-based paint is present on simple wood floors, sealing the surface and covering the floors with carpeting that meets abatement criteria may be considered appropriate from a preservation perspective.

When permanent removal of contaminated features is unavoidable, in-kind replication may be an acceptable alternative. Such an approach, however, should be considered only when loss of the feature would not seriously undermine the integrity of the historic property. If the contaminated features are of such importance that removal and replacement in-kind would be too great an intervention to allow approval according to the “Standards,” denial of certification may be warranted for violation of: Standard 1 because it is the proposed use that necessitates the removal; Standard 2 because the removal of historic materials has not preserved the historic character of the property; or Standard 5 because distinctive features and finishes have not been preserved.

This interim guidance was developed at the request of the Pennsylvania Historical and Museum Commission and the Mid-Atlantic Regional Office of the National Park Service; Brenda Barrett, Dan Deibler, Jim Caufield, Cindy MacLeod, Martha Raymond, Kate Catalano, John Hnedak, and Ward Jandl all participated in the discussions that led to this paper.