

CONCEPT PAPER TO:

DEVELOP GUIDE SPECIFICATIONS FOR
LEAD-BASED PAINT TESTING AND ABATEMENT IN BUILDINGS

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BACKGROUND

During the past few years concerns about lead in the interior environment have heightened as the public becomes more aware of the serious health consequences of lead ingestion, particularly in young children. New federal, state, and local legislation has been enacted in an effort to reduce the risk of exposure to lead. The need for readily available authoritative technical criteria on methods to identify and safely deal with lead-based paint (LBP) contamination is becoming better recognized. Public and private owners and managers of housing and building are undertaking lead-based paint inspection and abatement with increasing frequency. Reports indicate that much of this work is being improperly conducted and may actually be increasing workers' and occupants' exposure to unsafe levels of lead.

These concerns were identified in the findings of a NIBS' Lead-Based Paint Task Force published in February 1988, and by NIBS' Lead-based Paint Project Committee which developed the document Lead-based Paint Testing, abatement, cleanup, and Disposal Guidelines, for the U.S. Department of Housing and Urban Development in 1989. The HUD guidelines, expected to be released this year will be helpful, but a pressing need will remain for detailed technical criteria to facilitate: 1) designer, contractor, and worker training curricula; 2) routine operation and maintenance procedures; and, 3) technical guide specifications for procuring lead-based paint abatement related services, equipment and materials. The National Institute of Building Sciences proposes to develop a document that responds to the latter of these needs.

INTRODUCTION

The effective implementation of codes and rules requiring or regulating lead-based paint testing and abatement demands the availability of detailed administrative and technical guidance. Such guidance is needed to specify and procure applicable services, equipment, and materials and to define the roles and responsibilities of participants in the process.

NIBS proposes to develop guide specifications for use by the building and housing community, for the testing, abatement, cleanup and disposal of lead-based paint in and on buildings. The guide will assist those responsible for lead-based paint abatement by providing consensus based technical criteria to acquire services, equipment and materials that constitute available technology. The guide specifications will facilitate use of cost effective methods that are consistent with regulations and guidance from the U. S. Department of Housing and Urban Development and other federal agencies.

This proposal details the approach by which NIBS will develop the guide specifications through the Institute's consensus process. This proposal also projects the program's schedule and cost based on the scope of work previously approved by the Institute's Board of Directors.

SCOPE OF WORK

1. NIBS will produce a guide specification for the testing, abatement, cleanup, and disposal of lead-based paint and lead bearing dust on the interior and exterior surfaces of buildings and homes. The guide will incorporate state-of-the-art technical criteria with which to comply with federal lead-based paint regulations required by the 1987 Housing and Community Development Act and other applicable federal legislation and regulations. The guide also will provide technical provisions through which governmentally established health and safety requirements and owner desired levels of quality can be met. Criteria for the following functions will be included:

Testing procedures for detecting lead-based paint and lead bearing dust before, during, and after abatement to:

- a. develop data used to determine appropriate abatement actions;
- b. determine compliance with relevant federal worker and occupant protection requirements; and
- c. help assure adequate quality in the testing, abatement, clean-up and disposal processes.

Abatement procedures for accepted methods of abatement through removal, and/or encapsulation of lead containing materials, replacement of building components with lead-free construction, and other useful methods identified through available research and current documentation.

Cleanup procedures to assure compliance with applicable federal requirements for worker and occupant safety during and after abatement.

Disposal procedures to assure lead contaminated waste is handled and disposed of in accordance with current federal requirements.

The guide specifications will follow the three part format of the Construction Specifications Institute and the Masterformat numbering system.

2. The guide will provide instructions on its effective use for building owners and managers involved in the day to day operations of facilities, including guidance establishing procedures for LBP abatement work performed by building owners and their employees.

The guide specification will provide practical state-of-the-art procurement guidance for writing the technical portions of contracts to adequately communicate the requirements of owners to contractors qualified to perform this specialized work.

The guide will furnish technical information and provisions for design professionals and safety and health consultants who provide professional LBP testing and abatement services for building owners.

3. The guide will be developed with the advice and guidance of NIBS' Lead-Based Paint Project Committee for approval by the National Institute of Building Sciences' board of directors.

4. The National Institute of Building Sciences will maintain the guide specification to assure adequate coordination with advancing technology and the dynamics of applicable regulations and standards. NIBS has met such commitments to maintain the currency of its Model Guide Specifications, Asbestos Abatement and Management in Buildings which was published in 1986, updated in 1988, and are currently being revised to incorporate fast changing technological and regulatory developments.

TECHNICAL APPROACH

The project will be composed of the following tasks:

- Task 1. Produce a detailed work plan, schedule and budget for developing the guide specifications. The work plan will establish detailed scope and organization of material in the guide and the specific content of individual sections.
- Task 2. Develop work scopes, select, and execute contractors' agreements.
- Task 3. Draft specification sections and introduction.
- Task 4. Submit first draft for Project Committee review and comments.
- Task 5. Compile comments for the Project Committee's consideration and incorporate agreed upon changes and additions.
- Task 6. Submit second draft for Project Committee review and comments.
- Task 7. Compile comments for Project Committee consideration and incorporate agreed upon changes and additions.
- Task 8. Submit final draft of guide specification to Project Committee for acceptance by written ballot.
- Task 9. Resolve ballot comments through NIBS' consensus procedures.
- Task 10. Obtain the approval of NIBS oversight bodies and publish the final guide specifications.

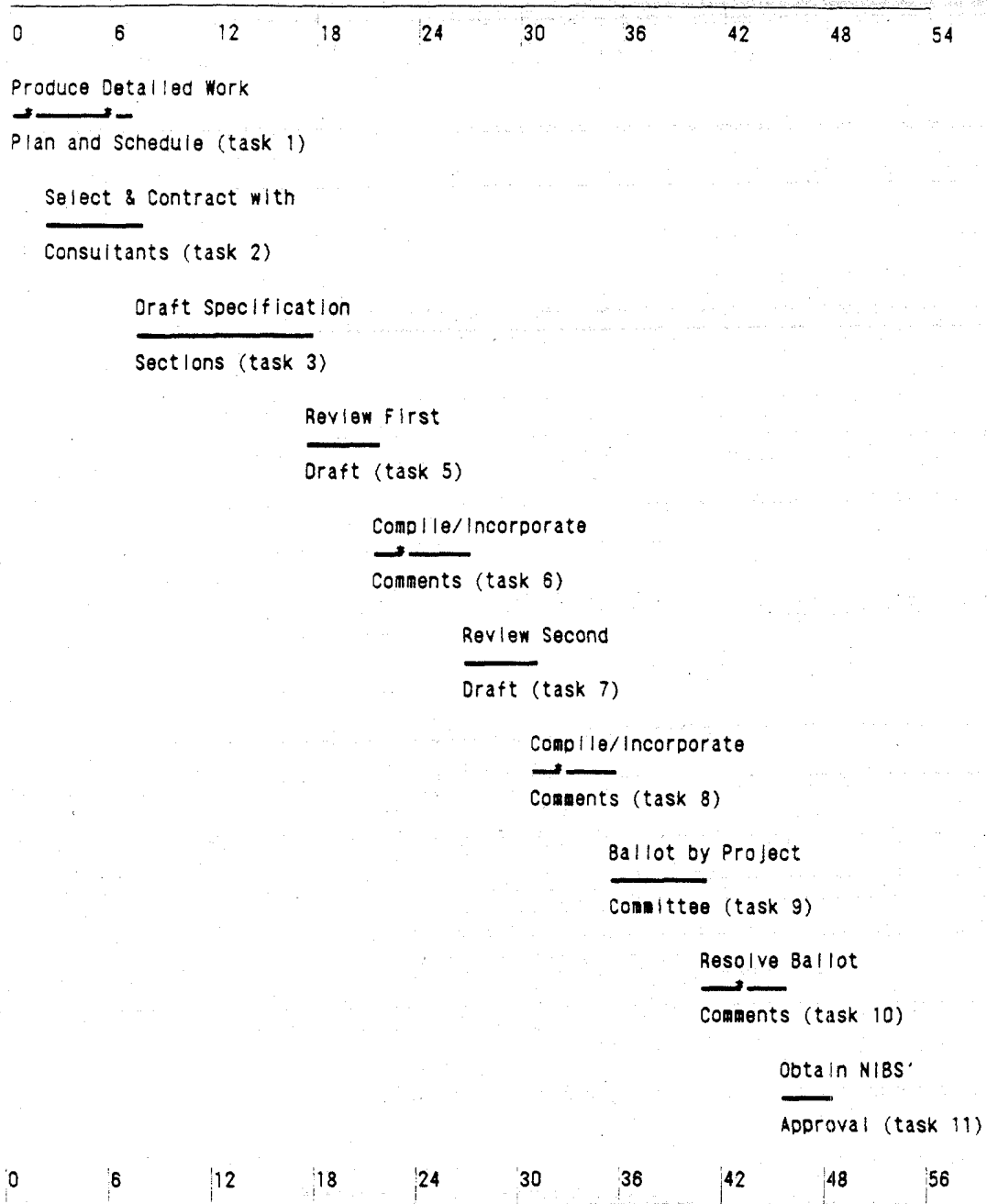
Qualified contractors will be retained to identify and translate appropriate existing procedures and practices into draft specification language. Selection of contractors will follow the Institute's evaluation procedures and consider knowledge and experience in LBP testing and abatement practices, knowledge of specification writing, housing maintenance and operations, facilities maintenance, and disposal procedures.

When task one is complete a more accurate projection of needed contractor services costs will more precisely set projected project budgets.

The final Document will be published by the Institute. The guide will be updated as needed to keep pace with technological and regulatory advances.

PRELIMINARY PROJECT SCHEDULE

The time estimated to complete tasks is shown in bar chart below. Project committee meetings are indicated with an asterisk in the task line (—*—). The 48 week project schedule will begin after forming the Project Committee.



PROPOSED FUNDING

NIBS will seek funding for developing a guide specification on lead abatement from a number of private sources and cooperating organizations with interest in this issue. A proposed budget is presented below with an estimated project cost of about \$170,000. This is followed by a list of potential funding sources.

Preliminary Project Budget

PROFESSIONAL	\$24,000.00
(Based on an average of 20 hours per week over 48 week project.)	
CLERICAL	4,000.00
TOTAL PAYROLL	28,000.00
FRINGES (44% of personnel costs)	12,320.00
CONSULTANTS	6,000.00
Specifications Consultant - 40 hours @ \$60.00/hr. = 2,400	
Lead-Based Paint Consultant - 60 hours @ \$60.00/hr. = 3,600	
CONTRACTORS	60,000.00
Specifications Contractor - 30,000	
LBP Specialty Contractor - 30,000	
(Each based on approximately 12 weeks full time @ \$60/hr.)	
PROJECT COMMITTEE TRAVEL	3,000.00
(Based on five trips for chairman at \$600/trip)	
TELEPHONE	800.00
POSTAGE/DELIVERY	1,500.00
(Based on 7 - \$3 mailings to assumed 70 member committee.)	
MEETING EXPENSES	1,500.00
(Based on \$300.00 per meeting for five meetings.)	
PRINTING/REPRODUCTION	4,500.00
(Based on PRINTING 300 PAGE document 7 times for 70 member committee = 150,000 copies @ 3 cents/copy.)	
OVERHEAD (Based on \$22.27 per hour of labor)	28,730.00
SUBTOTAL COSTS	146,350.00
G&A COSTS (Based on 16.49% of subtotal costs)	<u>24,133.00</u>
TOTAL COSTS	\$170,483.00

NIBS QUALIFICATIONS

History of the National Institute Of Building Sciences

NIBS is a nationally recognized, Congressionally authorized, non-profit, organization whose primary responsibility is to improve the building regulatory environment through the development and adoption of technical criteria with which to evaluate new and innovative technology and products for use in the building processes. NIBS was authorized by Section 809 of Public Law 93-383 (Attachment A). Congress specifically encourages and authorizes federal agencies to utilize NIBS and its' resources in programs which involve developing technical requirements for their building and construction programs.

NIBS Organization

NIBS has, through its councils and its public interest position, a direct line of communication to members and representatives of all building related trade, professional and labor organizations, private and public organizations interested in facilities planning, design, construction, operation and maintenance, manufacturers of building products and equipment, public and private testing agencies, public regulatory agencies and consensus groups. NIBS does not represent a single trade, technical or professional interest area; rather, it is a forum through which all knowledgeable and affected interests can be fairly heard and a consensus reached. The broad representation and balance of NIBS' Lead-Based Paint Project Committee exemplifies this concept and represents expertise unavailable elsewhere.

Related NIBS Programs:

Lead-Based Paint -- Problem Identification In 1987 NIBS formed a Task Force to identify specific lead-based paint problems and recommend building community action appropriate to resolve these problems. The Task Force organized and held a workshop in August, 1987, at which presentations were heard from technical and policy authorities with expertise and responsibility for various aspects of this growing problem. The Institute published the findings of the Task Force in February, 1988. The Task Force identified the serious shortage of policy direction. Once federal policy directions were established, technical criteria could be developed to enable the building and housing community to begin to provide a coordinated, consistent, and high quality response to federal and local policy.

Lead-Based Paint Guidelines In 1989, NIBS produced for the Department of Housing and Urban Development guidelines to provide a practical technical reference for those conducting lead-based paint testing and abatement in public and Indian housing. The document provides information on the following:

- o roles, responsibilities and qualifications
- o facility surveying, inspections, and testing methodologies
- o worker education and training
- o notification requirements and procedures
- o medical surveillance and respiratory protection
- o protective clothing and equipment for workers
- o procedures to protect the environment and building occupants
- o air monitoring, exposure monitoring and records
- o selecting appropriate abatement methods
- o engineering controls and work practice
- o inspection and clearance following abatement
- o proper handling and disposal of debris

Further effort is needed to integrate these practices into the procedures of public and private facility managers through the development and use of technical guidance such as authoritative guide specifications and pragmatic facility operation and maintenance manuals.

Asbestos In 1986, NIBS published the document, Model Guide Specifications, Asbestos Abatement and Management in Buildings. This technical guidance document was developed for use by architects, engineers and environmental consultants, and has brought about a more consistent approach in asbestos abatement and management activities in buildings. Building owners, designers, industrial hygienists and abatement contractors have found the document to be the authoritative source of quality guidance for this complex environmental problem. As a consensus document, this guide reflects the knowledge and experience of hundreds of individuals who contributed their time and effort to its preparation. In 1988 NIBS revised and expanded the guide to keep it current with regard to advancing technology and regulations, and to meet new needs of the building community. Experience and technical information gained during the preparation and maintenance of this guide will be put to practical use while preparing guide specifications to address lead-based paint problems.