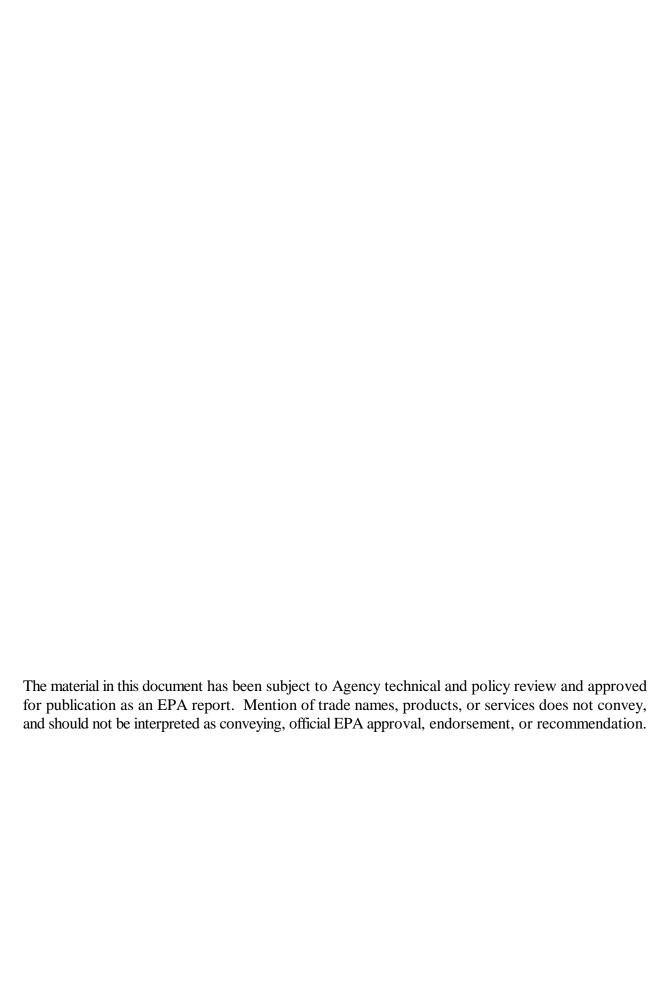
SURVEY OF STATE LEAD LABORATORY ACCREDITATION PROGRAMS

Technical Program Branch Chemical Management Division Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency Washington DC 20460



ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

This report contains the results of a survey of the 50 states and the District of Columbia on laboratory accreditation issues pertaining to the analysis of paint chips, dust, and soil for lead. The primary goals of the survey were to determine the number of states that already had an accreditation program in place which covered the analysis of paint chip, dust and soil samples for lead, and if states planned to utilize the EPA National Lead Laboratory Accreditation Program (NLLAP) as part of their state lead program.

The survey data were collected by interviewing each state lab director by telephone. A great deal of care was taken to ensure the appropriate respondent was contacted for the interview, this is, someone who could properly speak for the state on **lead laboratory accreditation** issues. The response rate was 100%; survey data were collected from all 50 states and the District of Columbia.

The primary responses from the survey about current and planned state-level laboratory accreditation include:

- Eighty percent of states* were familiar with NLLAP.
- Almost 50 percent of the states* currently utilize the NLLAP program for laboratories in their state.
- Sixty-seven percent, or 34 states*, indicated their intent to utilize either NLLAP or establish an NLLAP-equivalent laboratory accreditation program in their state lead program.
- Forty-two states* responded that they currently operate or manage a laboratory accreditation program for drinking water/waste water, 15 responded that they operate an accreditation program for metals in solid media, and 6 responded that they have an accreditation program for analysis of paint chip, dust, and soil samples for lead.
- A total of 19 states* (37 percent) with a metal or drinking water/waste water accreditation program indicated that their programs were adaptable to the laboratory analysis of paint chip, dust, and soil samples for lead.

^{*}When the word "state" is used throughout this report it includes the 50 states and Washington, D.C.

1.0 INTRODUCTION

1.1 Background on the National Lead Laboratory Accreditation Program (NLLAP)

Since its inception, EPA has been interested in the issue of environmental laboratory accreditation and quality assurance practices. NLLAP was established by the EPA Office of Pollution Prevention and Toxics (OPPT) under the legislative directive of section 405(b) of Title X of the Housing and Community development Act of 1992. NLLAP recognizes laboratories which have demonstrated the ability to accurately analyze for lead in paint chip, dust, and soil samples associated with the abatement and control of lead-based paint. In order for laboratories to be NLLAP recognized (or "EPA recognized" for the analysis of lead in paint chip, dust and soil samples) they must:

- 1. Successfully participate in the Environmental Lead Proficiency Analytical Testing (ELPAT) Program and;
- 2. Undergo a systems audit.

The ELPAT Program is administered by the American Industrial Hygiene Association (AIHA) in conjunction with the National Institute for Occupational Safety and Health (NIOSH). In order for laboratories to successfully participate in NLLAP, their performance rating by NIOSH must be "acceptable", having analyzed 75% of the proficiency test samples within the established sample lead concentrations limits. The four ELPAT test rounds per year are administered on a quarterly basis. Matrices covered in the testing are paint chips, dust wipes and soils.

The systems audit must be conducted by private or public laboratory accreditation organization recognized by NLLAP through a memorandum of understanding (MOU) with EPA OPPT. An on-site visit is also required as a part of the systems audit. Some of the areas evaluated in the audit include laboratory personnel qualifications, analytical instrumentation, quality assurance procedures, and facility record keeping procedures. All laboratories participating in NLLAP must undergo a systems audit at a minimum of once every three years.

1.2 Requirements for the Use of NLLAP Recognized Laboratories

On August 29, 1996 402 Rule, "Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities" was promulgated. The 402 Rule requires that upon **August 30, 1999,** for states or tribes without authorized programs, that all lead-based paint inspections, risk assessments and abatements must be conducted by certified contractors and must be conducted according to the standards in the 402 Rule. The 402 Rule requires any paint chip, dust or soil samples collected by certified contractors as a part of their lead-based paint inspections, risk assessments and abatements be sent for analysis to a laboratory recognized by EPA under the National Lead Laboratory Accreditation Program (NLLAP).

It is important to note that irrespective of the August 30, 1999 date for state/tribal compliance to the 402 Rule, laboratories are subject to current state¹ requirements for laboratory analyses. In example, if a state currently requires lead-based paint inspectors to use EPA/NLLAP recognized laboratories for all samples collected from target housing in their state, the laboratories utilized for sample analyses must meet that requirement. There are states which do have such requirements currently in place.

The use of NLLAP laboratories may also be required by grant/contract/work order specifications. Contractual requirements requiring the use of NLLAP have been used on projects funded by the Department of Defense and the Department of Housing and Urban Development.

It is also important to note, that irrespective of the legal requirements described above, the parties responsible for related lead-based paint abatement and control activities may wish to use NLLAP recognized laboratories to avoid potential liability in lead poisoning cases.

1.3 Study Objectives

Given NLLAP and 402/404, the survey was interested in obtaining an accurate evaluation of states' plans to establish a laboratory accreditation program for the analysis of lead in paint chip, dust, and soil samples, and information about current and future use of NLLAP.

The survey also requested information on state accreditation programs for laboratories performing analyses on environmental media for metals and drinking and waste water samples. The objective of obtaining this information is to provide an indication of the potential for other state laboratory accreditation programs to expand to cover the analysis of lead in paint chip, dust and soil samples.

¹When the word "state" is used throughout this report it includes the 50 states and Washington, D.C.

2.0 CONCLUSIONS

This section presents the results and conclusions for the lead in paint chips, dust, and soil programs, the solid environmental media for metals programs, and drinking water or waste water laboratory accreditation programs.

2.1 Lead in Paint Chips, Dust, and Soil Programs

Only 6 states (12% of all states) currently have a laboratory accreditation program for the analysis of paint chip, dust, and soil samples for lead. All 6 programs in place apply to commercial laboratories and 5 of the 6 are mandatory for commercial laboratories. Five of the 6 apply to state laboratories, and 4 of the 5 are mandatory.

Regarding proficiency testing, 4 of the 6 states have a proficiency testing program in place and 2 states do not. Regarding frequency of testing for these four states, 1 tested four times a year, and 2 tested twice a year.

Regarding systems audits, 5 states conducted systems audits and 1 did not. Of the 5 states that conducted systems audits, 4 states indicated that state personnel conducted the audits, and 1 state said they used an "other" organization, "AIHA," to perform the audits.

Regarding on-site assessments conducted as part of the systems audits, 5 of the 6 states included on-site assessments. The assessing organizations ranged among various state health and environmental agencies as well as a third party organization (AIHA). See Section 4.1, Question 13A11(a) for specific details.

Regarding program funding, all 6 states had user fees, 2 had grants, and 1 had state appropriations.

2.2 Solid Environmental Media for Metals Programs

There were 15 states (29%) with a laboratory accreditation program for metals in solid environmental media, more than double the number of laboratory accreditation programs for the analysis of paint chip, dust, and soil samples for lead. Again, all 15 programs apply to commercial laboratories and 12 of the 15 are mandatory. Fourteen of the 15 apply to state laboratories, and 11 of the 14 are mandatory.

Regarding proficiency testing, 11 of the 15 states responded that they have a proficiency testing program in place and 3 do not. Regarding frequency of testing of these 11, 4 tested once a year, 6 tested twice a year, and 1 tested 3 times a year.

Regarding systems audits, all 15 states conducted systems audits. The audits were conducted by state personnel in all 15 states.

Regarding on-site assessments conducted as part of the systems audits, 14 of the 15 states included on-site assessments. The assessing organizations again ranged among state health and environmental agencies, e.g., ecology, health, natural resources, environmental lab certification, epidemiology, etc., as well as a third party organization (AIHA). See Section 4.1, Question 13B11(a) for specific details.

Regarding program funding, 13 out of 15 states had user fees, 5 had state appropriations, and 3 had grants.

2.3 Drinking Water or Waste Water Programs

By far the greatest number of states have **water** laboratory accreditation programs. Forty-two responded that they have laboratory accreditation programs for drinking water or waste water analyses. This is a significant increase over the 6 states with accreditation programs for the analysis of paint chip, dust, and soil samples for lead, and 15 states with accreditation programs for metals. Forty-one of the programs apply to commercial laboratories and 32 are mandatory for commercial laboratories. Forty of the 42 programs apply to state laboratories, and 33 of the 40 are mandatory.

Regarding proficiency testing, 41 have a proficiency testing program in place. Regarding frequency of testing, 13 tested once a year, 23 tested twice a year, 4 tested 4 times a year, and 1 did not know the frequency of testing.

Regarding systems audits, all 42 respondents did systems audits. The audits were conducted by state personnel in 38 of 42 states and in 2 states by EPA, 1 by EPA and the state, and 1 by a university.

Regarding on-site assessments conducted as part of the systems audits, 41 states included on-site assessments. The assessing organizations again ranged among state health and environmental agencies, e.g., water, ecology, health, natural resources, environmental lab certification, epidemiology, etc., but did not include private sector organizations. See Section 4.1, Question 13C11(a) for specific details.

Regarding program funding, 28 states had user fees, 20 had state appropriations, and 10 had grants.

2.4 General Summary of Results

Out of the 50 states and the District of Columbia, 46 (90%) indicated that they have some type of laboratory accreditation program. Eighty-two percent of states currently operate or manage a laboratory accreditation program for drinking water or waste water, 29% operate or manage an accreditation program for metals in solid media, and 12% operate or manage a program for the analysis of paint chip, dust, and soil samples for lead. In contrast to the 12% of states with state operated programs, 29% of states indicated the utilization of a private sector laboratory accreditation program for the analysis of paint chip, dust, and soil samples for lead.

A total of 19 states (37%) indicated that either the laboratory accreditation program for their metals program, or drinking/waste water programs could be adaptable to the analysis of paint chip, dust, and soil samples for lead. Out of the 19 states, 13 states (68%) indicated that in the future, their state preferred to have some type of relationship with NLLAP, ranging from maintaining their own accreditation program as EPA/NLLAP recognized, to relying solely on the use of an NLLAP laboratory. All of the 19 states indicating adaptable programs reported that systems audits were conducted. Eighty-nine percent of the states with adaptable programs reported that there is a proficiency testing program in place for their program. None of the states with adaptable accreditation programs utilized the private sector for systems audits. The majority of states used state personnel for audits. Out of the 19 states with adaptable programs, the majority of programs for metals or water were at least partially funded by user fees (74%). Thirty-seven percent of states with adaptable programs were funded by state appropriations, and 21% were funded by grants.

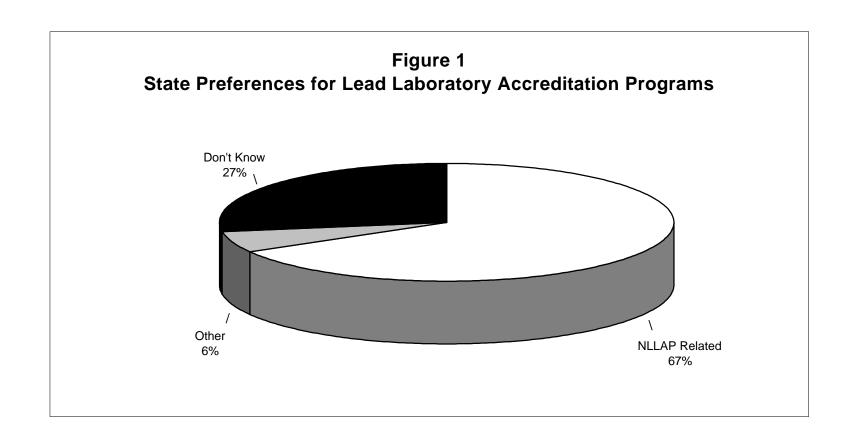
Regarding the state's feelings towards the use of NLLAP and NLLAP related options, 80% of all states were familiar with NLLAP. Almost 50% of all states currently utilize the NLLAP program for their laboratories. Forty-five percent of states indicated that they would prefer not to develop their own accreditation program, and would rather require the use of NLLAP laboratories. Twelve percent of states reported that they would prefer to develop or maintain their own accreditation program as an EPA/NLLAP-recognized accrediting organization (which includes a memorandum of understanding between EPA and the state). Another 10% preferred to develop or maintain their own accreditation program that is EPA-recognized as an NLLAP-equivalent program. Thus, 67% of states prefer to have some affiliation with the NLLAP program. (See Figure 1).

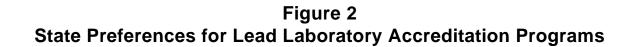
In review of the information generated by the survey, the following conclusions can be readily drawn concerning state efforts to address the issue of accreditation for laboratories involved in the analysis of paint chip, dust and soil samples.

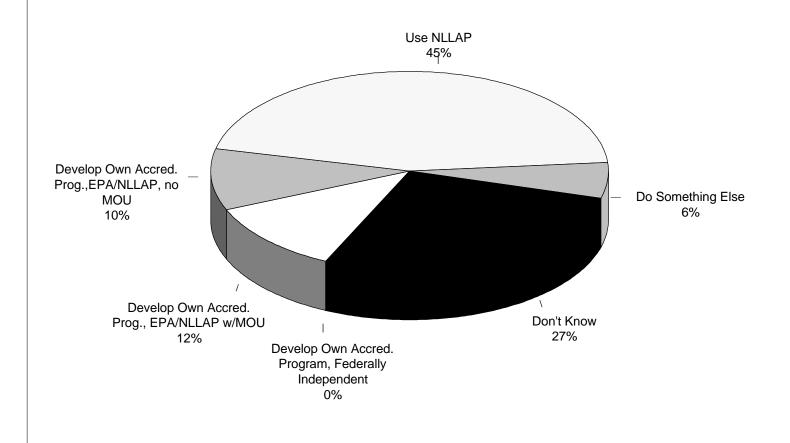
The majority of the states either currently utilize or plan in the future to utilize the services of NLLAP. Most states who plan to utilize NLLAP indicated a preference not to develop their own accreditation program for the analysis of paint chip, dust, and soil samples for lead but instead default to requiring the use of NLLAP recognized laboratories in their state. Although 19 states indicated they had laboratory accreditation programs which were possibly adaptable to cover the analysis of paint chip, dust and soil samples for lead, only 11 states wished to develop their own accreditation program. Of these eleven states, five wished not to sign a formal memorandum of understanding with the EPA but preferred to be recognized by EPA as "NLLAP equivalent."

A possible explanation for NLLAP's popularity with state programs is that it meets the critical concerns of states which were expressed in the comments and suggestions provided by state officials in response to the survey. States want a laboratory accreditation program which has well defined laboratory requirements, uniformly applicable on a nationwide basis with the potential for reciprocity between states and a program which does not require significant state resources. NLLAP is designed as a program which establishes laboratory requirements on a nationwide basis with a single proficiency testing program and can be utilized by states without the expenditure of significant (if any) resources.

The EPA values the input provided by states through surveys such as this, as well as input obtained by national forums, written correspondence, and verbal communications. Quality input from parties with a vested interest in the lead analyses of paint chip, dust and soil samples will allow EPA to develop and revise NLLAP so that the program can best meet the needs of the parties the program was intended to serve.







3.0 QUALITY ASSURANCE

This chapter describes the data quality assurance program for this study. In all surveys, the quality of results can be characterized in two major components:

- a) Completeness of coverage (measured by response rate); and•
- b) Accuracy of information provided (which depends on the identification of the appropriate contact, respondent's knowledge, understanding of the questions, and willingness to respond)•

Regarding the first component, completeness of coverage, this survey was a census of all 50 states and the District of Columbia. A response rate of 100% was achieved, thus the coverage was complete, and non-response bias was non-existent for the overall survey. Individual item non-response did, however, occur based on some respondent's lack of knowledge on a particular topic.

Regarding the second component, accuracy, several quality assurance measures were implemented to ensure the utmost quality of the data. Special care was taken to identify the appropriate respondent, an advance copy of the questionnaire was sent to all respondents so they could consult with others in advance and prepare the most accurate information, and responses collected during data collection were reviewed. These quality assurance measures are described in detail below.

3.1 Assurance of Appropriate Respondent Contact

The strategy adopted for identifying appropriate respondents who could represent the state on lead issues and to answer the survey questions for the particular state was a two-step approach. First, the document developed by the NCSL, "Lead Poisoning Prevention: Directory of State Contacts 1995-1996", was reviewed to locate laboratory program directors. The directory served as an initial screen to attempt to locate appropriate respondents. The directory provides contact name and telephone numbers for laboratory accreditation directors for each state and the District of Columbia. The contacts were informed of the nature and time frame of the survey and were asked to confirm that they were the correct representative for the state. If they were not, they were asked to identify a more appropriate person to complete the survey. This initial step was taken in order to maintain the highest quality data possible, by ensuring that the most appropriate representative of the state responded to the survey questions.

3.2 Advance Mailing of Questionnaire and NLLAP Brochure

The second step of the respondent identification and notification approach involved mailing information to the respondents in advance of the telephone interview. Each of the 51 potential respondents were sent by Federal Express, an advance copy of the questionnaire, a brochure on the NLLAP program, and an introductory letter. This quality assurance step was taken to that respondents could consult with others in order to prepare the most accurate

information in preparation for the telephone interview.

3.3 Comment Review and Follow-up

The third quality assurance step was the review of comments and recontacting of selected state officials to follow-up on questions concerning laboratory accreditation programs for paint chips, dust and/or soil for lead. All comments were reviewed by the study director and entered into a database. The database provided a means to present responses from all states to a specific question, as well as responses from all states to the entire questionnaire, by appropriate data sorts.

Additional follow-up was conducted when appropriate. This resulted in additional contacts identified and additional information developed in the comments.

3.4 Numeric Review and Follow-up

As the fourth step in the quality assurance process, each numerical response was reviewed by the study director. As instructed in training, the interviewer took notes of verbal comments received outside the questionnaire comment pattern. The study director reviewed these, and in selected instances where value-added comments were provided in addition to the response to the question, made follow-up calls.

The fifth step was the review of the frequency responses. The study director reviewed the frequencies as the final quality control step in the data cleaning process, and verified any inconsistencies in the data via additional follow-up as warranted.

4.0 STUDY DESIGN

4.1 Respondent Identification and Notification

The strategy adopted for identifying appropriate respondents who could represent the state on lead issues to answer the survey questions for the particular state was a two-step approach. First, the document developed by the NCSL, *Lead Poisoning Prevention: Directory of State Contacts 1995-1996* (also called the purple book), was reviewed to locate program directors. The directory served as an initial screen to attempt to locate appropriate respondents. The directory provides contact name and telephone numbers for laboratory accreditation directors for each state. Prior to the call records being prepared with the relevant contact information for the interviewers, two senior staff made calls to potential contacts identified from the purple book for each state and the District of Columbia. The contacts were informed of the nature and time frame of the survey and were asked to confirm that they were the correct representative for the state. If they were not, they were asked to identify a more appropriate person to complete the survey.

A spreadsheet was developed from the initial review of the purple book and updated as necessary when "more correct" respondents were identified. The final updated list of contacts was provided to telephone interviewers to begin the survey process. The updated spreadsheet list was used for generating shipping labels for the FedEx automated labeling and Internet tracking.

The second step of the respondent identification and notification approach involved mailing the information to the respondents in advance of the telephone interview. An appointment was set up for the interviewers to call back to complete the telephone interview. Each of the 51 potential respondents were sent an advance copy of the questionnaire, a brochure on the NLLAP program, and an introductory letter from the National Conference of State Legislatures. Federal Express's Internet tracking system report confirmed receipt by the agency. Due to time considerations and to maximize data quality, the decision was made to provide the questions in advance to candidate respondents, so that they could prepare their answers and do any necessary background research and be prepared to efficiently respond to a telephone survey based on these questions.

4.2 Survey Questionnaire Design

The questionnaire design was finalized in May, 1996. The questionnaire began with a general section that was asked of all respondents, with 12 questions that covered contact information, whether the state currently had a lead or laboratory accreditation program, if the state utilized any private sector accreditation programs, and familiarity and utilization of the NLLAP program. The questionnaire was then subdivided into 3 sections that were administered only if the state operated a laboratory accreditation program in the specified media: paint chips, dust and soil; metals; and drinking or waste water. Each of the three subsections asked 13 questions regarding whether the accreditation program for the specified media applied to commercial and state laboratories, if the program was mandatory or voluntary, if proficiency and systems audits were conducted, and how the program was funded. The average telephone administration time for the questionnaire was 10 minutes. The final questionnaire can be found in Appendix A.

5.0 INTERVIEWER TRAINING AND DATA COLLECTION

This chapter describes the interviewer training activities and the implementation of the survey.

5.1 Training

Interviewer training was conducted on May 7, 1996. Telephone center interviewers were given a background briefing on the survey, provided with the questionnaire, and were given the opportunity to clarify any issues. All interviewers were experienced in telephone data collection.

5.2 Data Collection

As discussed in section 4.1, Respondent Identification and Notification, the updated list of contacts was furnished to the telephone interviewers. The data collection strategy had three components:

- 1. Advance delivery of the questionnaire and supporting materials;
- 2. Initial contact for the purpose of making an appointment for the telephone interview; and
- 3. Telephone interview conducted with the respondent.

The questionnaires were sent to each respondent by Federal Express. The telephone interviewers began contacting respondents one week after the advance mailout of the questionnaires to collect the survey information. The field period was conducted from May 7, through May 25, 1996. Each telephone interview took an average of about 10 minutes to complete. After the telephone interviews were completed, the data from each questionnaire was data entered into a computer, and then edited and cleaned for analysis. A response rate of 100% was achieved; all 50 states and the District of Columbia participated in the survey.

6.0 DATA ANALYSIS

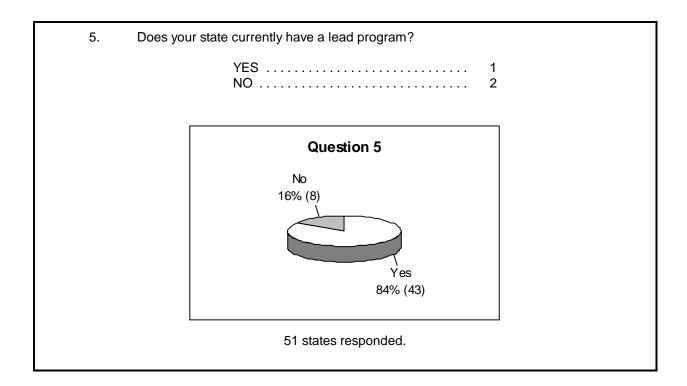
This section provides a numerical analysis and graphic presentations of the coded responses in an item by item format. This section also provides selected comments to the open-ended items provided by the 51 respondents.

The Survey was designed to utilize a categorical question-and-answer format. The respondents were given a set of categories to choose from as responses to each question which often required a simple YES/NO response. Occasionally, respondents were asked to fill in a blank, such as providing the annual frequency of proficiency tests. A few questions sought out qualitative information, such as the name of an assessing organization. Three questions elicited some general comments on specific issues.

This analysis presents the detailed quantitative results of the categorical and quantitative fill-in-the-blank questions. It also lists out the responses to qualitative questions. The quantitative results are presented in both numerical and graphical format. Only formal responses are included in the analysis.

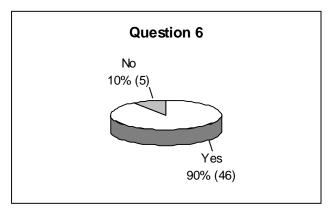
6.1 Analysis and Graphic Presentation

This Section presents the numeric analysis and a graphical presentation of specific response frequencies for each question, starting with Question 5, the first technical question. Whenever the tabulation indicates that fewer than 51 states responded, those who did not respond are the ones who legitimately skipped the question, since it did not apply to them based on previous responses.



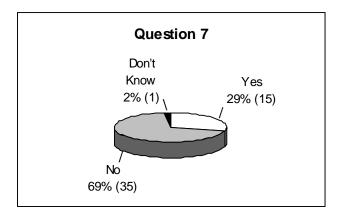
6. Does your state currently have a laboratory accreditation program of <u>any</u> kind?

YES																	1
NO																:	2



51 states responded.

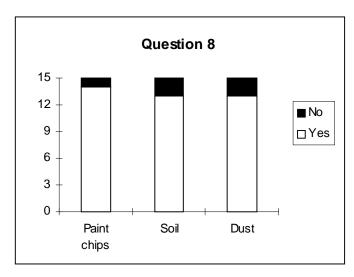
7. Does your state utilize any private sector laboratory accreditation programs for lead analysis of paint chips, dust, and soil samples?



51 states responded.

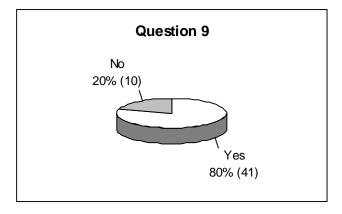
8. For which of the following media does your state utilize private sector accreditation programs for lead analyses?

	<u>YES</u>	<u>NO</u>
Paint chips	1	2
Soil	1	2
Dust	1	2



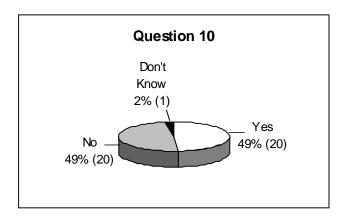
15 states responded to each data item.

9. Are you familiar with EPA's recognition program for laboratories conducting paint chip, dust and soil analysis for lead? The program, called the National Lead Laboratory Accreditation Program (NLLAP) recognizes private sector accreditation.

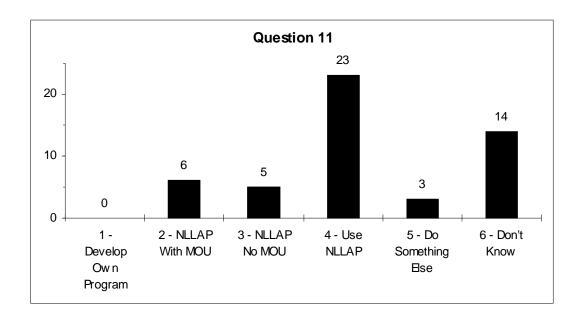


51 states responded.

10. Does your program currently utilize the EPA <u>recognized</u> National Lead Laboratory Accreditation Program (NLLAP) for laboratories in your state?



11.	In the future, concerning laboratories performing lead analyses on paint chip soil samples, does your state prefer to (circle one)	os, dust, and
	Develop or maintain your own accreditation program independent of any federal program,	1
	Develop or maintain your own accreditation program as an EPA/NLLAP recognized accrediting organization, (which includes a memorandum of understanding (MOU) between EPA and the state), .	2
	Develop or maintain your own accreditation program that is EPA recognized as an NLLAP equivalent program, (no memorandum of understanding is required),	3
	Not develop your own accreditation program, and require the use of EPA recognized (NLLAP) laboratories, or	4
	Do something else?	5
	(SPECIFY)	



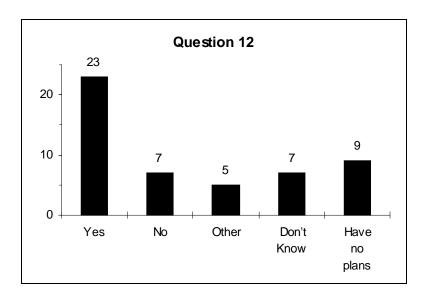
51 states responded.

3 states responded to (SPECIFY) as follows:

State Name	Comment
Arkansas	There is a NELAC group trying to develop guidelines we would be interested in.
North Carolina	State lab being used.
North Dakota	Have done a lot of testing, have no problems, so no plan.

12. If you have or plan to set up a lead analysis laboratory accreditation program of your own, do you, or do you anticipate that you will recognize other accrediting programs (i.e., federal, state, local, or private) in an effort to establish reciprocity between other federal or state programs?

YES	1
NO	
Other	3
(SPECIFY)	

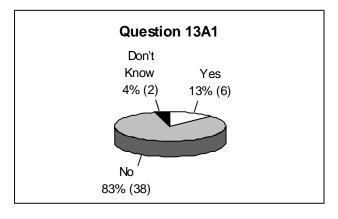


51 states responded.

5 states responded to "Other (SPECIFY)" as follows:

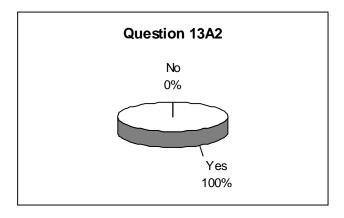
State Name	Comment
Arkansas	Has no reciprocity but accepts inspection of other labs
Massachusetts	No agency in place to assess any environmental labs
Minnesota	Would want reciprocity if they set the program up
Missouri	Would use EPA or NLLAP
Ohio	Already has program in place

13A1. Does your state currently operate or manage a laboratory accreditation program for paint chips, and/or dust, and /or soil for lead? (except: portable XRFs)

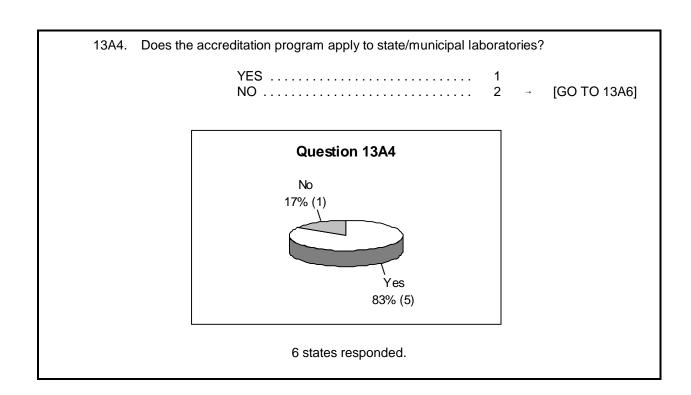


46 states responded.

13A2. Does the accreditation program apply to commercial laboratories?

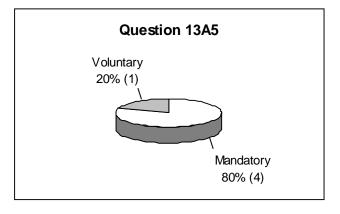


13A3. Is the ac	creditation program mandatory or voluntary for commercial laboratories? MANDATORY	
	Question 13A3 Voluntary 17% (1)	
	Mandatory 83% (5)	
	6 states responded.	



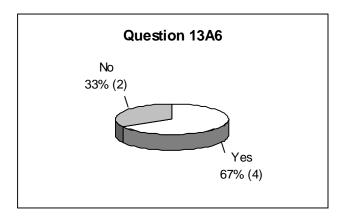
13A5. Is the accreditation program mandatory or voluntary for state/municipal laborato	ogram mandatory or voluntary for state/municipal lab	aboratories?
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MANDATORY 1
VOLUNTARY 2



5 states responded.

13A6. Is there a proficiency testing program in place for laboratories analyzing paint chips, and/or dust, and/or soil for lead?

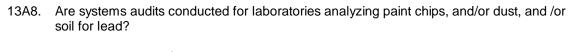


13A7. How may times per year is proficiency testing conducted?

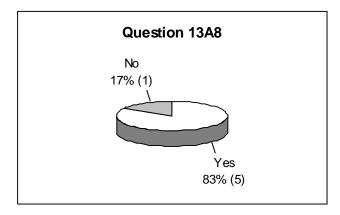
_______ times per year

Question 13A7
Don't
Know
25% (1)
2 times
50% (2)
4 times
25% (1)

4 states responded.

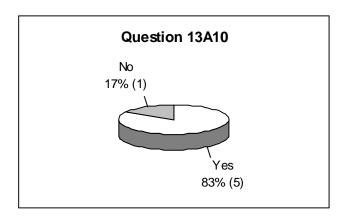




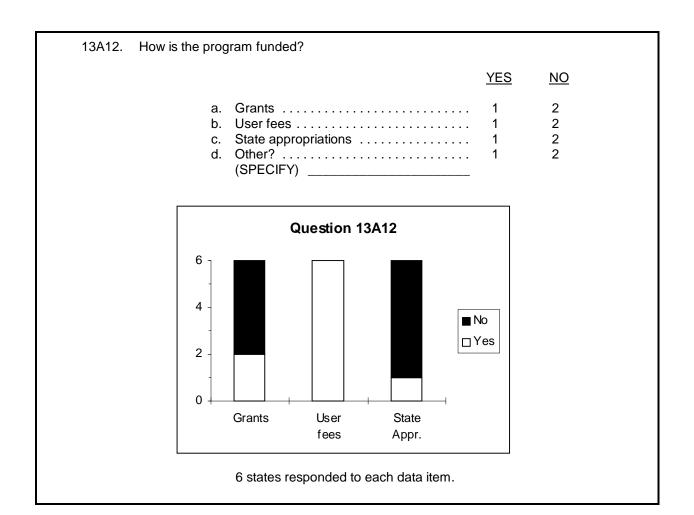


6 states responded.

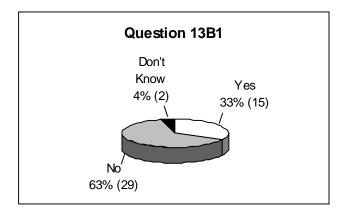
13A10. Are on-site assessments conducted as a part of the systems audits for laboratories analyzing paint chips, and/or dust, and /or soil for lead?



,	Who is the on-site assessing organization and ssessments conducted?	(b) how frequently are on-site
	a	
	b	
5 states re	sponded as follows:	
State Name	(a) On-Site Assessing Organization	(b) Frequency of On-Site Assessment
Arkansas	Pollution Control and Ecology	Once a year
Connecticut	The Department of Public Health, Environmental Health Services	Once every 3 years
New York	The State Environmental Lab Approval Program	Once a year
Ohio	The American Industrial Hygiene Association	Once every 3 years
Utah	The Bureau of Laboratory Improvement, Division of Epidemiology	Once every 2 years
	2, 2 states perform assessments every year, 1 state 2 years, and 2 states perform assessments every	

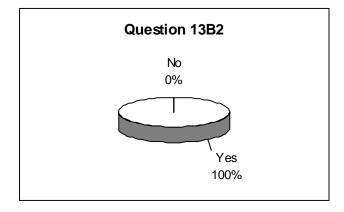


13B1. Does your state currently operate or manage an environmental laboratory accreditation program for **metals in solid media**?

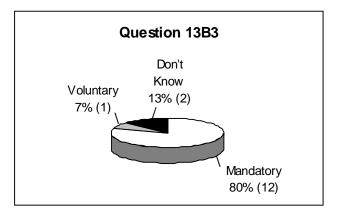


46 states responded.

13B2. Does the accreditation program apply to commercial laboratories?

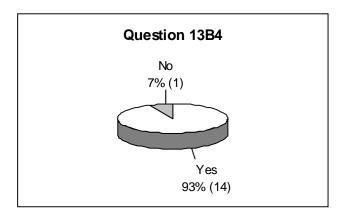


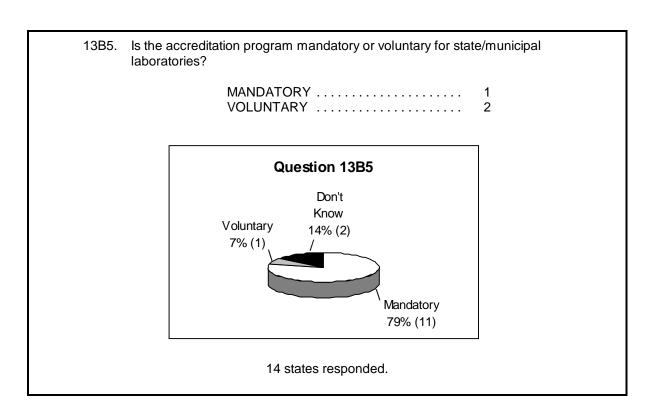
13B3. Is the accreditation program mandatory or voluntary for commercial laboratories?

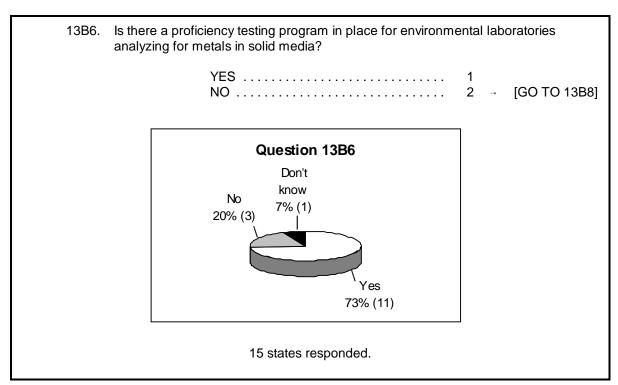


15 states responded.

13B4. Does the accreditation program apply to state/municipal laboratories?







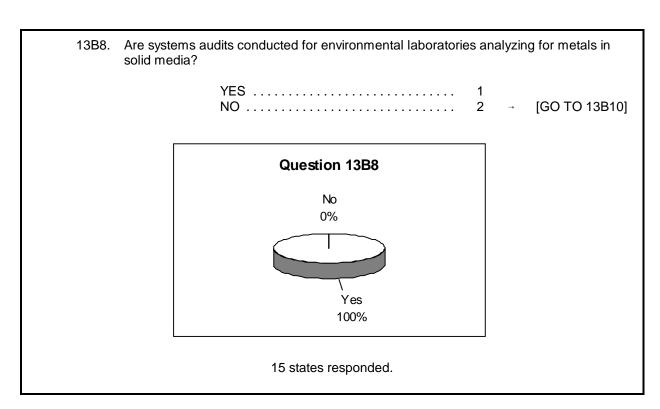
13B7. How many times per year is proficiency testing conducted?

________ times per year

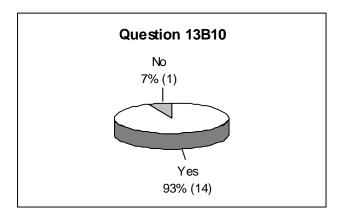
Question 13B7

3 times
9% (1)
2 times
55% (6)

11 states responded.



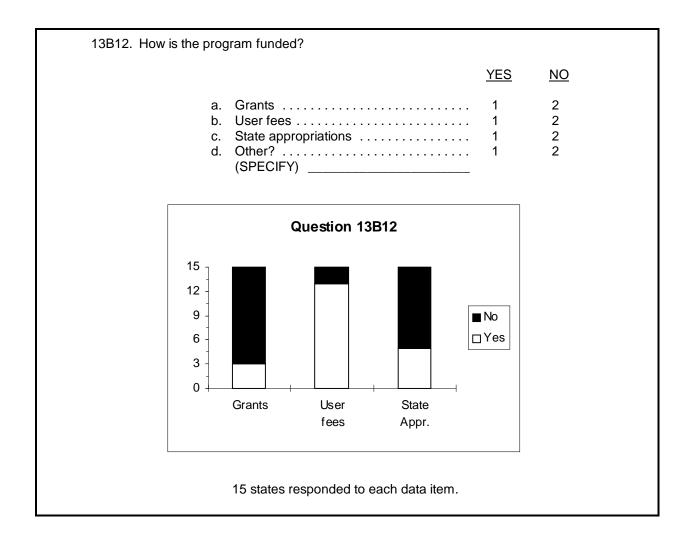
13B10. Are on-site assessments conducted as a part of the systems audits for environmental laboratories analyzing for metals in solid media?



B. SOLID ENVIRONMENTAL MEDIA FOR METALS

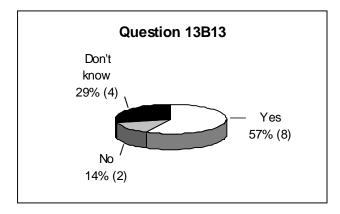
13B11. (a) Who is the on-site assessing organization and (b) how frequently are on-site assessments conducted?					
	a				
	b				
14 states resp	oonded, as follows:				
State Name Assessment	(a) On-Site Assessing Organization (b)	Frequency of On-Site			
Arizona	The Department of Health Services	Once a year			
Arkansas	Pollution Control and Ecology	Once a year			
Connecticut	The Department of Public Health,	Once every 3 years			
	Environmental Health Services				
Florida	The Florida Health & Rehab Services	Missing			
Maryland	state personnel	Once a year			
Minnesota	The Minnesota Department of Health	Once every 3 years			
Missouri	The Department of Natural Resources	Once every 3 years			
North Carolina	state personnel	Once a year			
North Dakota	The North Dakota Department of Health	Once every 3 years			
Ohio	The American Industrial Hygiene Association	Once every 3 years			
South Carolina	The Office of Environmental Lab Certification	Up to a 3 year rotating cycle			
Utah	The Bureau of Laboratory Improvement,	Once every 2 years			
	Division of Epidemiology				
Washington (state)	The Department of Ecology	Once every 2 years			
Wisconsin	The Department of Natural Resources	A less than annual cycle			
_	over the 14 states, 1 state does on-site assessment sments every year, 1 state performs it every 2 years very 3 years.				

B. SOLID ENVIRONMENTAL MEDIA FOR METALS



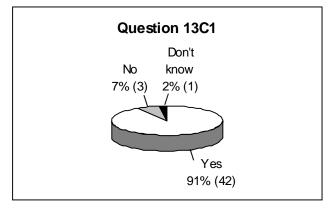
B. SOLID ENVIRONMENTAL MEDIA FOR METALS

13B13. If you don't have a laboratory accreditation program for paint chips, dust, and soil for lead, could the metals in solid media accreditation program be adapted?



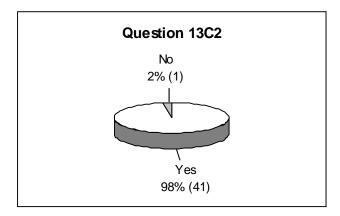
14 states responded.

13C1. Does your state currently operate or manage a laboratory accreditation program for **drinking and/or waste water analyses**?

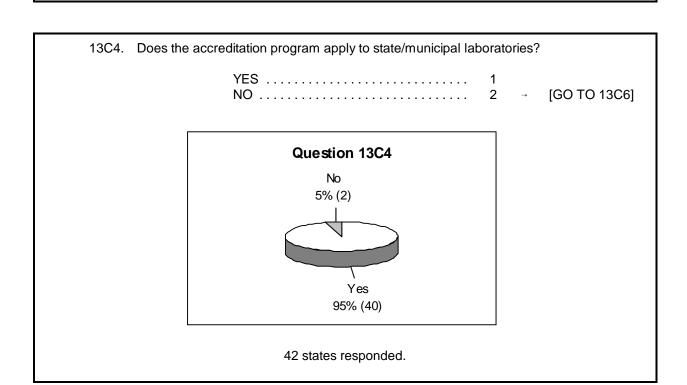


46 states responded.

13C2. Does the accreditation program apply to commercial laboratories?

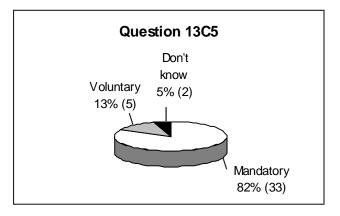


42 states responded.



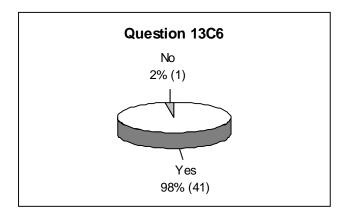
13C5. Is the accreditation program mandatory or voluntary for state/municipal laboratories?

MANDATORY 1
VOLUNTARY 2

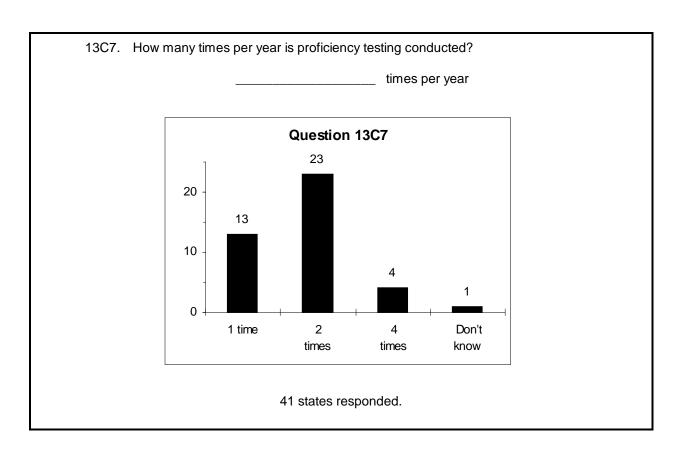


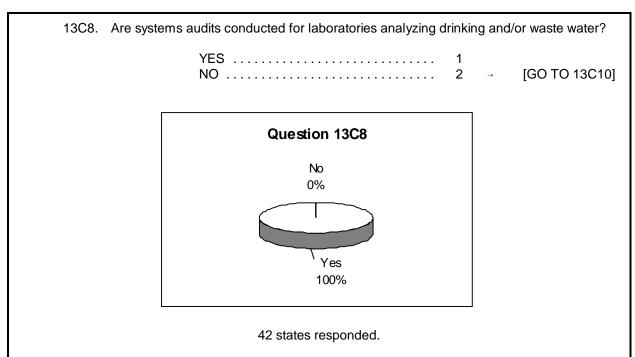
40 states responded.

13C6. Is there a proficiency testing program in place for laboratories analyzing drinking and/or waste water?

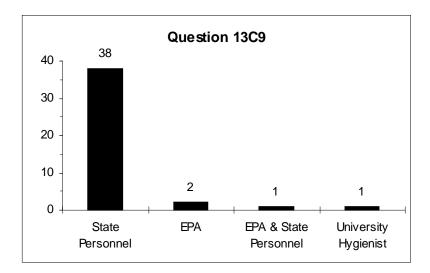


42 states responded.





13C9. Who conducts the systems audits?

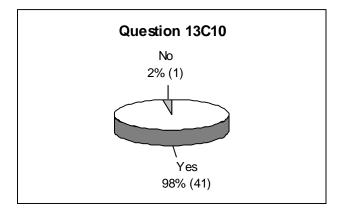


42 states responded.

4 states provided comments to "Other (SPECIFY)" as follows:

State Name	<u>Comment</u>
Delaware District of Columbia	EPA does the state lab audits, we have primacy EPA
Iowa	The University of Iowa Hygienic Laboratory
Wisconsin	EPA and state personnel

13C10. Are on-site assessments conducted as a part of the systems audits for laboratories analyzing drinking and/or waste water?



42 states responded.

13C11. (a) Who is the on-site assessing organization and (b) how frequently are on-site assessments conducted?					
asi	a				
	u				
	b				
39 states re	esponded, as follows:				
37 states le	sponded, as follows.				
State Name	On-site Assessing Organization	Frequency of Assessments			
Alaska	Dept. of Env. Cons, Div. of Env Health	Every 3 years			
Arizona	Pollution Control & Ecology	Once a year			
Arkansas	Pollution Control & Ecology	Every year			
California	Dept. of Health, Env. Lab. Accred. Div.	Don't know			
Connecticut	Dept. of Public Hlth., Env. Hlth Service	Every 3 years			
DC	EPA	Every year			
Delaware	Public Health & Office of Drinking Water	Every 3 years			
Florida	Health & Rehab. Srvcs. & Of. of Lab. Srvcs.	1/yr in state, 2/yr out of state			
Georgia	Env. Prot. Div., Div of Natural Resources	Every 3 years			
Hawaii	Department of Health	Every year			
Idaho	Bureau of Laboratories	Every year			
Illinois	Illinois EPA	Every 3 years			
Indiana	Department of Health	Every 3 years			
Iowa	University Hygienic Laboratory	Every 2 years			
Kansas	State	Every year			
Kentucky	Div of Water, Cabinet for NR&EP	Every year			
Louisiana	Office of Public Health	Every 2 years			
Maine	Department of Human Services	Every 2 years			
Maryland	State Personnel	Every year			
Massachusetts	Department of Environmental Prot.	Every 3 years			
Minnesota	Minnesota Department of Health	Every 3 years			
Mississippi	Office of Pollution Control, Health Dept.	"as needed"			
Missouri	Department of Natural Resources	Every 3 years			
N. Carolina	State Personnel	Every year			
N. Dakota	N. Dakota Department of Health	Every 3 years			
N. Hampshire	Lab. Cert. Prog., Dept. of Env. Srvcs.	3 yr state, 2 yr in state coml,			
		2-5 out of state			
Nebraska	Department of Health Labs	Every year			
New Jersey	State agency with state personnel	Every 3 years			
New York	State Environmental Lab Appr. Prog.	Every year			
Ohio	Department of Health	Every 3 years			
Oklahoma	State Dept. of Env. Quality	Every 2 years			

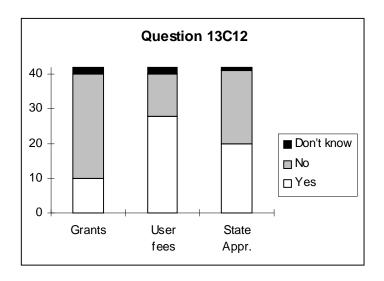
13C11 continued

State Name	On-site Assessing Organization	Frequency of Assessments
Rhode Island	DOH Div. of Facility Regulation	Every 2-3 years
S. Carolina	Office of Env. Lab. Certification	Every 3 years
S. Dakota	Public Health Laboratory	Every 3 years
Tennessee	Dept. of Environmental Health	Every year
Utah	Bur. of Laboratory Imp., Div. of Epidemiology	Every 2 years
Vermont	Department of Health	Every year, st. labs
Washington	Department of Ecology	Every 2 years
Wisconsin	DNR or EPA	Every 3 years

Summarizing the frequency of assessments, of the 39 states responding, 14 states reported conducting an on-site assessment annually, 7 biennially, 15 triennially, and 3 reported some other type of conditional frequency.

13C12. How is the program funded?

		<u>YES</u>	<u>NO</u>
a.	Grants	1	2
b.	User fees	1	2
c.	State appropriations	1	2
	Other?		2
	(SPECIFY)		



42 states responded to each data item.

3 states provided comments to "other," as follows:

District of Columbia Federal government

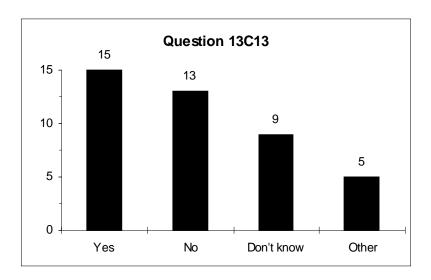
Florida Trust Funds

Missouri Certification fees and audit fees, does not consider these fees to

be user fees

13C13. If you don't have a laboratory accreditation program for paint chips, dust, and soil for lead, could the water accreditation program be adapted?

YES	1
NO	2
Comments	3



42 states responded.

5 states provided comments, as follows:

State Name	Comment
Kentucky	"Its not under us, not sure" May call NREP, Division of Water
	Director Jack Wilson, 502-564-3410.
New Hampshire	It could be, but there is no funding, no personnel.
Ohio	They do have laboratory accreditation.
Pennsylvania	Would need state EPA cooperation or agreement. Haven't
	approached them yet.
Vermont	It could but regulation for paint labs must go through
	EPA or private labs, have certification through Region I, EPA.

13C14. Are there any comments or suggestions you would like to offer regarding laboratory accreditation, NLLAP, utilization of private sector accrediting organizations, laboratory proficiency testing, etc.: Comments or suggestions: State Name Comments or Suggestions Alaska With declining state revenues (North Slope Oil Royalties) third party accreditation is becoming more important, if cost effective. Alaska is different than other states, it costs more to get people up here. NELAC will be what we'll follow. They'll set criteria for Arkansas accrediting labs - we'll make ours fit or they'll make a national program. Arizona Don't know what you are getting at. We have compliance testing but no NLLAP. I need more clarification. California California has a long history with CLIA and its own ELAP program for hazardous waste and the Superfund. Expansions should be with private sector organizations, we shouldn't develop duplicates for NLLAP, which they really like, and are glad its happening. No unfunded mandates are desired. Colorado EPA program appears to be sufficient - should qualify if NLLAP recognition will be required for state approval under section 404 regulations, NLLAP material should be sent to all labs in state, please contact me, Tom Tayon, 303 692-3185. Connecticut I'm involved w/NELAC - conference is in Washington in July. I'm all for establishing uniformity throughout the country. There should be standards for proficiency results & inspection. Inspectors should all get qualified training for inspectors. Delaware We do blood leads, drinking water under approval by CLIA. District of Columbia Would like to participate in other areas besides blood. Illinois NLLAP superior program. Every effort should be made to reduce the costs associated with Indiana accreditation process for labs. Please note that drinking and waste water programs are part of the Iowa Iowa Department of Natural Resources - NOT the Iowa Department of Public Health.

13C14 continued

State Name Comments or Suggestions

Kansas Concerned that accreditation standards, if adopted, be national in

scope.

Maryland National group to provide accreditation to set national standards.

Michigan None, NLLAP is a fairly well established program.

Minnesota We should discuss this program w/lead program staff to see if we

can accommodate needs in this area. We are actively participating

in NELAC which is looking for harmonizing accreditation

requirements for all EPA programs.

Missouri As with Clinical Laboratory Improvement Act (CLIA), it's become

a national standard. We would like to see implementation of ELPAT or NLLAP. Need to encourage provisions for state to be active agents. We'd like to see more national focus - we don't have the resources to do it ourselves. Like to see environmental

the resources to do it ourselves. Like to see environmental laboratory standards and regulations developed to all states to develop infrastructure directly and allow for a great deal of compatibility of federal and state - allow for reciprocity. Chuck Arnold, Bureau of Environmental Epidemiology, Enforcement and

Compliance of lead program is a good future reference @

573-571-6331 or 573-526-5873. Took John Scalera's name and fax

number.

Montana Not really - "We have no option" as told by director. Wait and see.

No, but thought it was a good survey and was happy to participate

No, but thought it was a good survey and was nappy to partici

in it.

New Hampshire We're following NELAC and hoping it succeeds.

New Mexico Requirements to become involved in NLLAP program not spelled

out clearly.

Nevada Ouestionnaire seems to be circular in some areas. I don't know how

this ended up on my desk.

Pennsylvania NLLAP doing a good job.

South Carolina They are working with NELAC conference trying to standardize

accrediting programs over the country. Accreditation requirements

should be standardized for all programs.

South Dakota There are lots of problems with Environmental Accreditation, with

conflicting information. I would like to see a national accreditation program with reciprocity - ASTPHLD at 202-822-5227 is working on a national program and you can get more info from them. There

will be a conference in June or July.

Texas This state has a low regulation philosophy. Citizens would

probably benefit by increased accreditation requirements this circumstance. (TX has "no" on lead program, question 5).

13C14 continued

<u>State Name</u> <u>Comments or Suggestions</u>

Utah For any accreditation in laboratory area, in future they should

consider NELAC program, not have an accrediting program that's

not part of that - for all states.

Vermont Shouldn't have separate like New York, I fully support NLLAP,

some one doing water could do paint.

West Virginia If EPA sets up a National Accreditation Program for labs

conducting lead sampling analysis, that would be sufficient. We would not need to duplicate at state level, as long as the program was in place. We would recognize AIHA & NLLAP labs because

they meet stringent requirements and programs.

Wisconsin Uniform national rules or standards would be helpful.

APPENDIX

TELEPHONE SURVEY INSTRUMENT

STATE SURVEY OF LABORATORY ACCREDITATION PROGRAMS

The National Conference of State Legislators is conducting a national telephone survey about state laboratory accreditation programs. This copy of the survey is for your convenience in collecting the appropriate information. A telephone interviewer will contact you within the next week or so to obtain the answers to these questions by phone. If you have any questions regarding the survey, please contact Bill Devlin at (301) 294-2840. Thank you very much for your participation.

1.	State Office:					
2.	Contact Name:					
3.	Position:					
4.	Telephone Number: (Fax: (_)	
5.	Does your state curren	tly have a lead program?				
		YESNO		1 2		
6.	Does your state curren	tly have a laboratory accreditation pro	ogram o	of <u>an</u>	y kind?	
		YESNO			\rightarrow	[ASK 7-12, & 13C14, THEN END SURVEY]
7.	Does your state utilize paint chips, dust, and s	any private sector laboratory accred oil samples?	litation	prog	rams fo	r lead analysis of
		YESNO			\rightarrow	[GO TO 9]
8.	For which of the follow lead analyses? (CIRCL	ing media does your state utilize priva E ALL THAT APPLY)	ate sec	tor a	ccredita	tion programs for
			<u>`</u>	<u>YES</u>	<u>NO</u>	
		Paint chips Soil Dust		1 1 1	2 2 2	

9.	Are you familiar with EPA's recognition program for laboratories conducti soil analysis for lead? The program, called the National Lead Laboratory (NLLAP) recognizes private sector accreditation.	
	YES	→ [GO TO 11]
10.	Does your program currently utilize the EPA <u>recognized</u> National Lead L Program (NLLAP) for laboratories in your state?	aboratory Accreditation
	YES	
11.	In the future, concerning laboratories performing lead analyses on pair samples, does your state prefer to (circle one)	nt chips, dust, and soil
	Develop or maintain your own accreditation program independent of any federal program,	1
	Develop or maintain your own accreditation program as an EPA/NLLAP recognized accrediting organization, (which includes a memorandum of understanding between EPA and the state),	2
	Develop or maintain your own accreditation program that is EPA recognized as an NLLAP equivalent program, (no memorandum of understanding is required),	3
	Not develop your own accreditation program, and require the use of EPA recognized (NLLAP) laboratories, or	4
	Do something else?	5
	(SPECIFY)	
	Don't know?	8
12.	If you have or plan to set up a lead analysis laboratory accreditation proyou, or do you anticipate that you will recognize other accrediting progra local, or private) in an effort to establish reciprocity between other federal	ms (i.e., federal, state,
	YES 1	
	NO	

IF NO TO Q6 THEN GO TO 13C14.

A. PAINT CHIPS, AND/OR DUST, AND/OR SOIL FOR LEAD

13A1.	 Does your state currently operate or manage a laboratory accreditation program for and/or dust, and /or soil for lead? (except: portable XRFs) 			n for paint chips ,	
		YES		\rightarrow	[GO TO 13B1]
13A2.	Does the accreditation	program apply to commercial laboratories?			
		YESNO		\rightarrow	[GO TO 13A4]
13A3.	Is the accreditation pro	gram mandatory or voluntary for commerci	al lab	oratorie	s?
		MANDATORY VOLUNTARY	1 2		
13A4.	Does the accreditation	program apply to state/municipal laboratori	es?		
		YES		\rightarrow	[GO TO 13A6]
13A5.	Is the accreditation pro	gram mandatory or voluntary for state/mun	icipal	l laborate	ories?
		MANDATORY VOLUNTARY	1 2		
13A6.	Is there a proficiency to and/or soil for lead?	esting program in place for laboratories and	alyzin	ig paint o	chips, and/or dust,
		YESNO		\rightarrow	[GO TO 13A8]
13A7.	How may times per year	ar is proficiency testing conducted?			
		times per year			
13A8.	Are systems audits corlead?	nducted for laboratories analyzing paint chi	ps, a	nd/or du	st, and /or soil for
		YES	1		IGO TO 134101

13A9.	Who conducts the syste	ems audits?		
		State personnel, Private sector personnel, or Other? (SPECIFY)	2	
13A10.	Are on-site assessmen paint chips, and/or dust	ats conducted as a part of the systems at and /or soil for lead?	udits for	laboratories analyzing
		YESNO		[GO TO 13A12]
13A11.	(a) Who is the on-site conducted?	assessing organization and (b) how frequency	uently are	e on-site assessments
		a		
		b		
13A12.	. How is the program fun	ded?		
			<u>YES</u>	<u>NO</u>
		Grants	1 1 1 1	2 2 2 2

B. ANALYSES OF SOLID ENVIRONMENTAL MEDIA FOR METALS

13B1.	Does your state current for metals in solid me	tly operate or manage an environmental la	borat	tory accr	editation program
		YESNO		\rightarrow	[GO TO 13C1]
13B2.	Does the accreditation	program apply to commercial laboratories?	,		
		YESNO		\rightarrow	[GO TO 13B4]
13B3.	Is the accreditation pro	gram mandatory or voluntary for commerci	al lab	oratories	s?
		MANDATORY VOLUNTARY			
13B4.	Does the accreditation	program apply to state/municipal laboratori	es?		
		YESNO		\rightarrow	[GO TO 13B6]
13B5.	Is the accreditation pro	gram mandatory or voluntary for state/mun	icipal	l laborato	ories?
		MANDATORY VOLUNTARY	1 2		
13B6.	Is there a proficiency metals in solid media?	testing program in place for environme	ntal I	aborator	ries analyzing for
		YESNO		\rightarrow	[GO TO 13B8]
13B7.	How many times per ye	ear is proficiency testing conducted?			
		times per year			
13B8.	Are systems audits c media?	onducted for environmental laboratories	analy	yzing fo	r metals in solid
		YES	1 2	\rightarrow	[GO TO 13B10]

13B9.	Who conducts the syst	ems audits?	
		State personnel, Private sector personnel, or Other? (SPECIFY)	2
13B10.		ents conducted as a part of the syste for metals in solid media?	ems audits for environmental
		YES	
13B11.	(a) Who is the on-site conducted?	assessing organization and (b) how freq	uently are on-site assessments
		a	
		b	
13B12.	. How is the program fur	nded?	
			YES NO
	b.	Grants User fees State appropriations Other? (SPECIFY)	1 2 1 2
13B13.		oratory accreditation program for paint chip iia accreditation program be adapted?	os, dust, and soil for lead, could
		YES NO Comments	1 2 3

13C1.	Does your state curre and/or waste water a	ntly operate or manage a laboratory accre nalyses?	editat	ion prog	ram for drinking
		YESNO		\rightarrow	[GO TO 13C14]
13C2.	Does the accreditation	program apply to commercial laboratories?)		
		YESNO		\rightarrow	[GO TO 13C4]
13C3.	Is the accreditation pro	ogram mandatory or voluntary?			
		MANDATORY VOLUNTARY	1 2		
13C4.	Does the accreditation	program apply to state/municipal laboratori	es?		
		YES		\rightarrow	[GO TO 13C6]
13C5.	Is the accreditation pro	ogram mandatory or voluntary for state/mun	icipal	laborate	ories?
		MANDATORY VOLUNTARY	1 2		
13C6.	Is there a proficiency water?	testing program in place for laboratories a	nalyz	zing drin	king and/or waste
		YES		\rightarrow	[GO TO 13C8]
13C7.	How many times per y	ear is proficiency testing conducted?			
		times per year			
13C8.	Are systems audits cor	nducted for laboratories analyzing drinking a	and/o	r waste v	water?
		YES	1	\rightarrow	IGO TO 13C101

13C9.	Who conducts the syst	ems audits?			
		State personnel, Private sector personnel, or Other? (SPECIFY)	2		
13C10.	. Are on-site assessmer drinking and/or waste v	nts conducted as a part of the systems a vater?	udits f	or lab	ooratories analyzing
		YESNO		\rightarrow	[GO TO 13C12]
13C11.	. (a) Who is the on-site conducted?	assessing organization and (b) how freq	uently	are c	on-site assessments
		a			
		b			
13C12.	. How is the program fur	nded?			
			<u>YES</u>		<u>NO</u>
	b.	Grants User fees State appropriations Other? (SPECIFY)			2 2 2 2
13C13.	. If you don't have a labothe the water accreditation	oratory accreditation program for paint chip program be adapted?	os, dus	st, and	d soil for lead, could
		YES NO Comments	1 2 3		

ny comments or suggestions you would like to offer regarding laborate NLLAP, utilization of private sector accrediting organizations, laborate sting, etc.:
Comments or suggestions: