April 14, 2004

Benjamin H. Grumbles
Acting Assistant Administrator
United States Environmental Protection Agency
Washington, D.C. 20460

Re: Lead in Drinking Water at Schools/Day Care Facilities

Dear Mr. Grumbles:

This is in response to your letter dated March 18, 2004 to Allen Biaggi, Administrator, Nevada Division of Environmental Protection. Currently, the Nevada State Health Division (NSHD) does not have a special program to control lead in drinking water at schools and day care facilities. We are not aware of any other state department/division that has such a program. Special efforts were undertaken in the late 1980s by the NSHDs Bureau of Health Protection Services (BHPS) to inform schools of the possible presence of lead in their drinking water as well as plumbing fixtures which could likely be a source of elevated lead levels, and they recommended remedial actions. The BHPS also conducted public information dissemination and technical assistance activities (such as workshops) for school districts in order to educate them about lead in schools' drinking water.

If a school’s water supply comes from a community public water system, the water is monitored under the Lead and Copper Rule by sampling the specified number of sites (based on the population served) meeting specific criteria. The sampling conducted for community water systems is carried out at single family residences, or sometimes multiple family residential buildings. No samples from schools would be included. If the 90th percentile lead level from the sampling sites is below the Action Level (0.015 mg/l), the system is in compliance. Schools are not specifically addressed since they are receiving the same water which is deemed to be in compliance based on the prescribed sampling protocol.

If a school has its own water source, it is a non-transient noncommunity public water system. It would then be regulated under the Lead and Copper Rule except that the sampling points (5 required) are now specifically on the school campus. The same compliance Action Level for lead applies for community water systems.
I hope that this information answers your questions about lead control in drinking water for schools and day care facilities. If you should have any other questions or need more information, please feel free to contact Andy Huray, Manager of the Public Health Engineering section of BHPS at (775) 687-6353, ext. 229.

Sincerely,

[Signature]

Yvonne Sylva
Administrator

YS/caw

cc: Allen Biaggi, Administrator, NDEP
    Amy Roukie, Chief, BHPS
    Andy Huray, Manager, Public Health Engineering, BHPS
May 24, 2004

Benjamin Grumbles
Acting Assistant Administrator
Office of Ground Water and Drinking Water
Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: The State of New Hampshire’s Programs to Control Lead in School Drinking Water

Dear Mr. Grumbles,

In response to your letter requesting information so you can learn more about the New Hampshire Department of Environmental Services’ (DES) efforts to protect children for lead in drinking water, Commissioner Nolin has asked that I provide you with an update of the DES activities relative to lead in school drinking water. The DES, through its Water Supply Engineering Bureau is the program that has taken the lead role in the DES efforts to reduce lead exposure to children resulting from their school’s drinking water. This goal is presently predicated on: The Lead Ban under the Safe Drinking Water Act Amendments of 1986, sections 109 and 1417; The Lead Contamination Control Act (LCCA) of 1988 and; the Lead and Copper Rule (LCR) of June 7, 1991.

Since June of 1986 the State of New Hampshire Plumbing Board has allowed only the use of “lead-free” pipe, solder and flux in the installation or repair of public water systems, or any plumbing in a residential or non-residential facility providing water for human consumption, which is connected to a public water system. The term “lead free” means that solders and flux may not contain more than 0.2 percent lead, and that pipes and fittings may not contain more than 8.0 percent lead.

In 1988 the NDES provided information to all schools in New Hampshire about the Lead Contamination Control Act (LCCA). By the means of direct mail and seminars it was explained to schools that water coolers could be a serious source of lead contamination for children. Schools were informed how they could identify whether any of their existing water coolers were not lead-free and, when necessary, which lead-free water coolers could be used to replace those with unacceptable lead concentrations. In addition schools were encouraged to look at other sources of possible lead contamination such as interior plumbing, faucets and kitchen facilities. To help the schools facilitate these actions a list of laboratories certified for lead analysis was also provided.
The DES has also administered the Lead and Copper Rule since 1991. The State has approximately 1,100 water systems that are subject to the Lead and Copper Rule with 190 of those water systems being individual schools. This means that the majority (approximately 840) of the remaining schools have their drinking water provided to them by community water systems. Because of the way sample sites are chosen, as required by the rule, the 190 schools that have their own individual water systems have detailed lead sample site results for their drinking water, while the majority of the schools that are served by community water systems have few if any lead sample site results.

The DES believes that the vast majority of schools that are served by community water systems in New Hampshire do have acceptable levels of lead in their drinking water. However, in order to better determine whether or not this premise is true this May the DES will be contacting all community water systems that provide drinking water to schools and request that they sample for lead levels at representative sites at those schools. By completing such a sampling regiment water systems will then be better able to determine which if any schools have lead problems. In addition the WSEB plans to hold a number of seminars about lead in drinking water for schools and community water systems this summer and fall.

If you have any questions please contact Bernie Lucey of the Water Supply Engineering Bureau at 603-271-2952 or blucey@des.state.nh.us

Sincerely,

Rene Pelletier, Manager
Land Resource Programs

Cc: Michael P. Nolin, Commissioner NHDES
April 28, 2004

Benjamin H. Grumbles
Acting Assistant Administrator
U. S. Environmental Protection Agency
Washington, DC  20460

Dear Mr. Grumbles:

Thank you for your recent letter regarding the State of New Hampshire’s efforts to monitor and protect children from exposure to lead in drinking water at schools and child care facilities. The New Hampshire Department of Environmental Services regulates community water supplies. It is my understanding that they are sending a separate reply to your inquiry to them regarding this matter. Thus, this response includes only those areas for which the Department of Health and Human Services (DHHS) is responsible.

DHHS includes a Childhood Lead Poisoning Prevention Program (CLPPP), funded by the Centers for Disease Control and Prevention (CDC) and your agency. DHHS also has responsibility for the licensure of childcare facilities, which is housed within the Office of Program Support (OPS).

OPS has regulatory authority over the water from private water supplies serving licensed child care facilities. The pertinent section of that rule, He-C 4002.17 is as follows:


(a) Programs shall ensure that a safe supply of water under pressure is available for drinking and household use in accordance with the following:

1. Hot water under pressure, which measures at least 100 degrees Fahrenheit, shall be available at all sinks used by children during operating hours;

2. Notwithstanding (a)(1) above, school age programs which serve only school age children and which are located in buildings which currently house public or private schools shall not be required to have hot water;

3. Hot water at taps which are accessible to children shall have an automatic control to maintain a temperature at the tap of not higher than 120 degrees Fahrenheit;
(4) A program which cares for more than 24 children, and which has its own independent water supply that is considered to be a non-transient non-community water system, subject to regulation by the department of environmental services, shall have on file, available for review by the health officer and the department, a written document which lists the United States environmental protection agency identification number of the system, assigned by the New Hampshire department of environmental services; and

(5) Programs which have their own independent water supply and are caring for 24 or fewer children shall maintain on file, available for review, evidence that their water supply has been tested in accordance with the following:

a. Water testing shall be performed by the department of environmental services laboratory or by an independent water-testing lab certified by the department of environmental services to perform such tests in accordance with Env-C 300;

b. Water test results shall be repeated annually and maintained on file at the program, available for review by the health officer and the department;

c. For new applicants, documentation that not more than 90 days prior to the date the application is received by the department the water has been tested for bacteria, nitrates, nitrites and lead and determined to be at acceptable levels in accordance with the following:

1. Env-Ws 315.07 for bacteria; and

2. Env-Ws 316.01 for nitrates, nitrites and lead;

d. For renewal of license, documentation that on an annual basis, water has been tested for bacteria and nitrates and determined to be at acceptable levels, in accordance with Env-Ws 315.07 for bacteria and Env-Ws 316.01 for nitrates;

e. Any program whose water has been tested and has failed to meet the acceptable levels identified in this section, shall:

1. Immediately contact the department to report that finding, and provide the department with a plan for how it will ensure that children will not be at risk from exposure to the unsafe water; and

2. Submit to the department an acceptable corrective action plan which details what action will be taken to correct the unsafe condition of the water and a date by which that action will be complete; and
f. When a program fails to submit a written proposed corrective action plan within 10 days of receiving the unacceptable test result under (a)(5) e, above, the department shall initiate action to suspend the license or permit in accordance with He-C 4002.10(n)(1), until such time as laboratory results meeting those requirements are received by the department.

The statutory authority of the CLPPP does not include provisions related to lead in drinking water at schools or childcare facilities. However, CLPPP staff have provided training to childcare licensing staff regarding lead poisoning prevention strategies, including the risks from lead in water and requirements under state statute RSA 130-A, which defines lead-based paint hazards. The OPS childcare facility regulations also require that all painted surfaces have intact paint.

Water supply administrative rule Env-Ws 316.01, which is referenced in He-C 4002.17(a) (5) (c) (1) above is as follows:

(d) The concentrations of lead and copper in drinking water shall be regulated as follows:

(1) The MCLG for lead in drinking water shall be zero mg/L;

(2) The action level for lead in drinking water shall be that concentration level which when exceeded, requires treatment and user education. Public water systems that have lead concentrations below 15 parts per billion in more than 90% of their tap water samples, have met the action level;

Thank you for your interest in our activities related to these areas. Please contact Wendy Kessler, supervisor of the childcare licensing unit at (603) 271-4564 or Michelle Dembiec, supervisor of the CLPPP at (603) 271-4509 for further information.

Sincerely,

[Signature]
John A. Stephen
Commissioner

cc: William Kassler
    Neil Twitchell
    M. Dembiec
April 22, 2004

Mr. Benjamin H. Grumbles
United States Environmental Protection Agency
Office of Ground Water and Drinking Water
1200 Pennsylvania Avenue, NW
Washington, District of Columbia 20460

Dear Mr. Grumbles:

Thank you for your inquiry about our activities regarding the monitoring of lead in drinking water at schools and day care centers. Our work in this regard is coordinated with the New Jersey Department of Environmental Protection (DEP), which is the State Primacy Agency under the federal Safe Drinking Water regulations. In addition, the New Jersey Department of Health and Senior Services (DHSS) collects blood lead data under State regulations mandating childhood and occupational screening.

The DEP has a current agreement with the United States Environmental Protection Agency (USEPA) Regional Office to share in public school testing in some school districts, to survey the remainder about the extent of their testing under the Lead Contamination and Control Act (LCCA) of 1988, and to provide guidance materials to all districts. This activity is being conducted in coordination with the DHSS and the New Jersey Department of Education (DOE). Our contribution is to help create a brochure that introduces and simplifies the steps in the USEPA Guidance document. The DEP provided all school districts with those same materials when they were originally available.

In the early 1990s, the DEP and the DHSS had conducted exposure studies in schools that were shared with relevant State agencies. The DHSS component examined the compliance of plumbing contractors and school district plumbers with the LCCA requirement of using lead-free solder. Schools and day care centers with new construction or remodeling involving plumbing were tested for the presence of lead solder. The results of this study were published in Environmental Research (Berkowitz, 1995, 71:55-59) and in newsletters of a variety of organizations (including a plumber association). The DOE and State Department of Human Services (for day-care centers) were informed about the results and the importance of monitoring lead in drinking water.

DEP will be providing additional information related to New Jersey’s school-based lead initiatives under separate cover. I hope you find the information provided useful.

Sincerely,

James S. Blumenstock
Deputy Commissioner
Public Health Protection & Emergency Preparedness

c: Bradley Campbell, Commissioner DEP
   Barker Hamill, DEP
   James A. Brownlee, DHSS
   Jerald A. Fagliano, DHSS
April 14, 2004

Mr. Benjamin Grumbles
Acting Assistant Administrator
Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

Dear Mr. Grumbles:

This letter is in response to your request, dated March 18, 2004, for information on state programs to control lead and copper in school drinking water.

The New Mexico Environment Department Drinking Water Bureau (NMED-DWB) is responsible for implementing the Safe Drinking Water Act in New Mexico and has been monitoring all water systems, including schools and day care facilities, which meet the definition of a public water supply system. Since 1992, NMED-DWB has collected and analyzed lead and copper samples and continues to monitor these systems at the required sampling frequency set by lead and copper rule. The results for schools and day care facilities that have been regulated by the NMED-DWB have shown no elevated levels of lead or copper to date.

All new construction at any regulated public water system is required to comply with current construction standards, including the prohibition on the use of lead solder. Additionally, all materials used in public water system construction that will come into contact with drinking water must meet the quality standards of the National Sanitation Foundation (NSF).

However, at the current time, schools and day care facilities may exist which have not been regulated for this contaminant. The NMED-DWB will attempt to identify and inspect any of these facilities which do exist, and if it is found that they meet the requirements of a public supply water system, the NMED-DWB will regulate these facilities according to the lead and copper rule.
The NMED-DWB will work collaboratively with EPA to ensure that schools and day care facilities that are classified as a public water supply system will continue to meet the requirements of the lead and copper rule.

If I can be of any further assistance, please fell free to contact me at 505-827-2855, or the Drinking Water Bureau Chief, Fernando Martinez at 505-827-1400.

Sincerely,

Ron Curry,
Cabinet Secretary
New Mexico Environment Department
Honorable Benjamin H. Grumbles  
Acting Assistant Administrator for Water Programs  
United States Environmental Protection Agency  
3219 East Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Dear Acting Assistant Administrator Grumbles:

This is in response to your letter seeking the assistance of the New York State Department of Environmental Conservation (Department) in learning more about State and local efforts to monitor and protect children from exposure to lead in drinking water.

In New York State, that responsibility falls to the New York State Department of Health (DOH). I understand that your correspondence was copied to DOH Commissioner Dr. Antonia Novello, and suggest that you contact her office to see if they have the information you seek.

If I can be of further assistance, please do not hesitate to contact me at (518) 402-8540.

Sincerely,

Erin M. Crotty

c: Commissioner Antonia C. Novello, M.D., M.P.H., Dr.P.H.
May 14, 2004

Mr. Benjamin Grumbles
Acting Assistant Administrator
Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

Dear Mr. Grumbles:

Re: Background and Status Report -
   Lead and Copper

The New York State Department of Health (DOH) and the New York State Education Department (SED), through a cooperative effort, began a program to assist New York’s schools in reducing the level of lead in their drinking water in the Spring of 1989. At that time, the Environmental Protection Agency’s (EPA) guidance document entitled "Lead in School Drinking Water" was distributed to more than 700 school districts in New York, as well as licensed day-care centers throughout New York. In addition, DOH and SED staff participated in a number of workshops and provided direct technical assistance to school district representatives clarifying the responsibilities delineated in the Lead Contamination Control Act (LCCA) of 1988.

In the summer of 1991, the DOH’s Bureau of Water Supply Protection (BWSP) prepared and transmitted a follow-up questionnaire to the more than 700 school districts in New York to determine the extent of compliance with the LCCA. A copy of the questionnaire and the questionnaire results are enclosed.

There are more than 400 schools in New York that operate and maintain their own drinking water supply. The water supplies at these schools are regulated by the state, and are subject to the requirements of the Lead & Copper Rule. These schools provide corrosion control and public education if the action level for lead is exceeded. BWSP staff have compiled 90th percentile lead levels for public water systems with populations of 3300 and above and have forwarded this data to EPA. BWSP staff will also be compiling 90th percentile lead levels for all regulated school water systems this summer. When available, we will also send EPA that information.
The DOH and the SED are now conducting a joint effort to assess the potential for children's exposure to lead in the drinking water at targeted schools. Using the State's Safe Drinking Water Information System, staff from the BWSP have identified public water systems whose 90th percentile lead levels exceed 10 micrograms per liter (ppb). This list of "vulnerable" systems was provided to SED staff. SED staff prepared the enclosed survey form for transmittal to those schools that are served by a "vulnerable" public water system. The results of this survey, along with any required follow-up actions, will be shared with EPA by the end of June 2004.

BWSP staff have been collaborating with EPA Region 2 staff to evaluate the efforts made by large city schools in New York to control lead in their drinking water systems. Water supplied to all 1,200 public schools in New York City was sampled with a total of 33,857 drinking water outlet samples collected. In the City of Syracuse, 137 schools were sampled with a total of 2,351 drinking water outlet samples collected. In New York City, mitigative measures were taken at outlets in 370 schools, while in Syracuse mitigative measures were taken at 289 outlets. The City of Rochester schools will be sampled in May and July of this year, and we anticipate expanding this initiative to other large city schools in New York.

Feel free to have your staff contact me at (518) 402-7650 regarding additional information about our lead control programs as they relate to water systems, schools and day care facilities.

Sincerely,

Michael E. Burke, P.E.
Director
Bureau of Water Supply Protection

Enclosures

cc: R. Tramontano
    G. Birkhead
    J. Kenney - EPA, Reg. 2
    B. Kiselica-EPA, Reg. 2
    D. McKenna-EPA, Reg. 2
    C. Thurnau - NYSED
    L. Sahr - NYSED
    R. Svenson
DRAFT

April 2004

TO: Superintendents of School Buildings and Grounds

FROM: Carl Thurnau

SUBJECT: Lead in School Drinking Water

The enclosed survey on the lead in school drinking water is a collaborative effort by the New York State Education Department and State Department of Health.

Background

Exposure to lead is a critical health concern, especially in children whose growing bodies tend to absorb more lead than adults. Since water pipes, taps, and solder can contain lead, drinking water can be a potential source of lead exposure. The longer water remains in contact with leaded plumbing components, the likelihood for lead to leach into water increases. As a result, facilities with on again/off again water use patterns, such as schools, may have elevated lead concentrations in the water. Testing the water at each outlet is the only sure way to find out if the water contains too much lead. The Environmental Protection Agency (EPA) recommends that action be taken at a specific outlet when the lead concentration exceeds 20 parts per billion (ppb).

Additional Information

Additional information and guidance on lead in school drinking water may be found at the following web sites:
http://www.health.state.ny.us/nysdoh/lead/leadwtr.htm
http://www.epa.gov/safewater/lead/pdfs/v2final.pdf
http://www.epa.gov/safewater/kids/child.html

Survey

Please complete the attached survey and return it no later than May 7, 2004 to:

Laura Sahr
NYS Education Department
Office of Facilities Planning
Room 1060 EBA
Albany, New York 12234 OR FAX to: 518-486-5918.
# Lead in School Drinking Water Survey

(please print)

<table>
<thead>
<tr>
<th>School District Name</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Building Name</th>
<th>Grades in this Building</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Person Completing this Survey</th>
<th>Telephone Number</th>
</tr>
</thead>
</table>

1. Has a plumbing profile been developed for this building?
   - Yes_______
   - No_______
   - Unsure_______

2. Has the drinking water in this building been sampled for the presence of lead?
   - Yes_______
   - No_______ (skip to question 6)
   - Unsure_______

3. If the drinking water has been sampled, how have you communicated the results to parents, faculty, staff, and others? (check all that apply)
   - Newsletter_____
   - Letter/Memo_____
   - Public meeting_____
   - Unsure_______
   - Other (please specify)_____

4. If the drinking water has been sampled, were the sample results:
   - less than 20 ppb_______
   - greater than 20 ppb_______

5. What follow-up actions have been taken as a result of the sampling? (check all that apply)
   - Flushing program_____
   - Plumbing replacement_____
   - Bottled water_____
   - Unsure_______
   - Other (please specify)_____

6. Do you need assistance on lead in school drinking water?
   - Yes_______
   - No_______

Please return it no later than May 7, 2004 to Laura Sahr at the address above or FAX to: 518-486-5918. Thank you for your assistance.
INTEROFFICE MEMORANDUM

TO: City/County Commissioners of Health, Public Health Directors
District Directors

FROM: Michael E. Burke, P.E., Director
Bureau of Public Water Supply Protection

SUBJECT: Lead in School Drinking Water

DATE: February 12, 1992

In the summer of 1991 the Bureau of Public Water Supply Protection (BPWSP) sent a questionnaire to more than 700 School Districts in New York to determine the extent of compliance with the Federal Lead Contamination Control Act of 1988 (LCCA). The LCCA, as described in an EPA Guidance Manual disseminated to School Districts in the spring of 1989, recommended that schools assess the potential for lead in their drinking water. There was a mandate that the results of any lead tests completed be made available to the public, teachers, other school personnel and parents. The LCCA also contains provisions for the testing, recall, repair and/or replacement of water coolers with lead-lined storage tanks.

The BPWSP's questionnaire was designed to evaluate the degree of implementation of this program by determining whether schools had received the EPA Guidance Document, ascertaining whether the potential for lead in schools was assessed, determining whether the required public notifications were completed, identifying what remedial actions were initiated, determining whether any lead-lined coolers were identified and replaced and ascertaining the results of any testing. Completed questionnaires were returned from 425 School Districts (61%). Some questionnaires, however, were incomplete and representative only individual schools within Districts or BOCES Centers.

Overall, the questionnaire results indicated that most School Districts have completed assessments (85% of those responding). Of the 15,682 sample results reported, 4,252 (27%) were above the current EPA lead in drinking water action level for schools. Approximately 67% of the Districts reported at least one sample above this action level. In most cases, the School Districts indicated that some sort of remedial action was initiated.

Attached is a report prepared by Bureau of Public Water Supply Protection staff which summarizes the results obtained from the questionnaire. If you have any questions, please contact Ms. Pat Roth of the Bureau of Public Water Supply Protection at (516) 231-1880 or (518) 458-6731.

tm102/92017PRO00681

Attachment
cc: Ms. Kelly
Dr. Stasiuk
Mr. Tramontano/Mr. McCarthy
Mr. Covey
Ms. Roth
Section Chiefs
Dr. Smith-Blackwell
Mr. Smith
Ms. Watkins
Mr. Walker/Mr. Harstad
Mr. Walsh, DOE
Dr. Timer, DOE
Mr. Williams/Mr. Kahn, Region II, U.S.EPA
City/County Directors of Environmental Health
INTRODUCTION

The Federal Lead Contamination Control Act of 1988 (LCCA) required that educational institutions (schools) conduct assessments of the potential for lead in their drinking water. As the designated State agency to implement the Act in New York, the New York State Department of Health (DOH), in cooperation with the New York State Department of Education (DOE), in the spring of 1989 disseminated to all School Districts in New York the U.S. Environmental Protection Agency's (EPA) Guidance Manual on "Lead in School Drinking Water." DOH and DOE staff also participated in a number of workshops and provided direct technical assistance to School District representatives on the responsibilities included in the Act.

To evaluate the effectiveness of this program, the DOH prepared and disseminated a questionnaire to all 700+ School Districts in the summer of 1991. The questionnaire and transmittal letter are included as Appendix A.

RESPONSE

The DOH received responses from 425 (61%) of the School Districts. Some responses, however, were incomplete or represented only individual schools within a District or BOCES Center. While it is not possible from the questionnaire or responses to determine the thoroughness or quality of assessments completed, the response does indicate that awareness was heightened by the dissemination of the Guidance Manual, in that 85% of the responders indicated that some sort of assessment was conducted.

The LCCA itself does not require reporting to the states. However, the Law does mandate that the results of lead analyses be made available to the public, teachers, other school personnel and parents. The lack of a reporting mandate limited our ability to obtain data. Individuals assigned the responsibility for this program by School Districts also varied considerably, including maintenance supervisors, superintendents and principals, school nurses, health and safety officers and business managers, among others. A lack of clear direction and/or lack of knowledge of water supply issues may have also resulted in inaccurate or incomplete responses.

QUESTIONS/RESPONSES

1. DID YOUR SCHOOL DISTRICT RECEIVE THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA) GUIDANCE DOCUMENT "LEAD IN SCHOOL DRINKING WATER" IN THE SPRING OF 1989?
   - 387 Districts (91%) responding received the EPA document.
   - 30 Districts (7%) did not receive the EPA document.
   - 5 Districts (1%) provided incomplete answers.
   - 3 Districts (1%) indicated they did not know if the document was received.

2. HAS A PROGRAM TO ASSESS THE POTENTIAL FOR LEAD IN YOUR SCHOOL'S DRINKING WATER BEEN INITIATED?
   - 361 Districts (85%) responded that an assessment was conducted.
   - 61 Districts (14.4%) did not conduct assessments.
a. HOW MANY SAMPLES WERE COLLECTED?
   • 15,682 sample results were reported.
   • 395 Districts (93%) reported that they collected and analyzed samples. However, approximately 80 Districts did not report how many samples were collected.

b. HOW MANY FIRST DRAW SAMPLES COLLECTED WERE ABOVE 15 MICROGRAMS/LITER (UG/L)*
   • 4252 first-draw samples were above 15 ug/l*
   • 283 Districts (67%) reported at least one first-draw sample above 15 ug/l. Given the EPA Guidance available, most samples were likely first-draw. In addition, some Districts only reported the results of samples which exceeded 15 ug/l.

c. HOW MANY FLUSHED SAMPLES WERE ABOVE 15 ug/l*
   • 1262 flushed samples were above 15 ug/l*
   • 262 Districts (62%) reported at least one flushed sample above 15 ug/l.
   • Approximately 35% of the sample results reported exceeded the 15 ug/l level.

   *15 ug/l (Note: ug/l is the same as parts per billion (ppb)) was used for the purposes of this questionnaire, because at the time of the development of the questionnaire it was expected that the 20 ug/l level in the LCCA would be changed when the new Federal Lead and Copper Rule of 1991 became effective. The new EPA standard is based on an action level of 15 ug/l.

4. APPROXIMATELY HOW MANY OF THE SCHOOLS' COOLERS WERE ON THE EPA LIST OF LEAD-LINED COOLERS?
   • 289 coolers were on the EPA list of lead-lined coolers.

5. DID THE MANUFACTURER REPLACE, REFUND OR GIVE A REBATE ON THE PURCHASE OF A NEW COOLER?

Although some districts responded to this question, the response was not clear. Fifteen (15) districts responded with some mentioning replacement and others reporting coolers removed from service.

6. WERE SCHOOL STAFF AND PARENTS NOTIFIED OF THE LEAD IN DRINKING WATER ASSESSMENT?
   • 278 Districts (65%) reported they made notification.
   • 63 Districts (15%) did not make notification.
   • 84 Districts (20%) provided incomplete information.

7. WHAT REMEDIATION MEASURES WERE UNDERTAKEN TO REDUCE EXPOSURE TO LEAD?
195 respondents provided comments.

This represents approximately 46% of those Districts responding. The information provided in the comments section mentioned issues such as the location of sampling and analysis, inability to find lab reports for exact numbers, reasons for not thoroughly completing lead in school drinking water assessments, lack of time, etc.

9. DID SCHOOLS CONTRACT WITH A NEW YORK STATE APPROVED LABORATORY FOR ANALYSIS PURPOSES?

- 301 Districts (71%) used New York State approved laboratory.
- 40 Districts (9%) did not use New York State approved laboratory.
- 84 Districts (20%) did not supply laboratory information.
DEAR SCHOOL SUPERINTENDENT:

In the Spring of 1989, the Departments of Health and Education embarked on a program to assist schools in reducing the level of lead in school drinking water. The program was initiated by means of the dissemination of the Environmental Protection Agency's (EPA) Guidance Document, "Lead in School Drinking Water." The guidance document presented methods to be followed to eliminate the use of lead lined water coolers as well as to reduce lead levels in potable water in schools. The Lead Contamination Control Act (LCCA) of 1988 as described in the guidance document requires that if a school tests for lead in drinking water, the results be made available to the public, teachers, other school personnel, and parents.

To evaluate the effectiveness of this program, the New York State Department of Health is asking for your help. The results of your lead in school drinking water assessments will help to determine the need for continuing programs to reduce exposures from lead in school drinking water. Therefore, we ask your assistance in completing the enclosed questionnaire.

We would greatly appreciate it if the completed questionnaires could be returned by July 12, 1991 to:

Ms. Patricia A. Roth  
Lead Program Coordinator  
Bureau of Public Water Supply Protection  
New York State Department of Health  
1215 Western Avenue  
Albany, NY 12203-3313

If you have questions regarding the information requested, please contact Ms. Patricia Roth. Ms. Roth may be reached at (516) 231-1880 or (518) 458-6731.

Sincerely,

Michael E. Burke, P.E.  
Director  
Bureau of Public Water Supply Protection

Enclosure
Dr. Mae Timer, NYS DOE
Dr. Randolph/Ms. Kelly
Dr. Stasiuk
Dr. Hetling/Mr. McCarthy
Ms. Roth
Mr. Covey
City/County Commissioner of Health, Public Health Directors
District Directors
Mr. Smith/Mr. Orndorff
Dr. Noonan/Ms. Watkins
Dr. Smith-Blackwell
Mr. Walker/Mr. Harstad
Dr. Mohanka
Directors of Environmental Health
NEW YORK STATE DEPARTMENT OF HEALTH

LEAD IN SCHOOL DRINKING WATER QUESTIONNAIRE

In the Spring of 1989, the Departments of Health and Education sent to schools a copy of the Environmental Protection Agency's (EPA) Guidance Document, "Lead in School Drinking Water." The document presented information and described methods to be followed to eliminate the use of certain lead lined water coolers as well as steps to be taken to reduce lead levels at other potable water sites in the school.

To determine the status of schools testing for lead in school drinking water, we are asking for your help. Please complete and return this questionnaire.

Please fill in the answer to the following questions and return by July 12, 1991. Thank you for your cooperation.

Name and Address of School District

________________________________________________________________________

________________________________________________________________________

Phone ____________________________________________________________________

Name of Superintendent _________________________________________________

Name and phone number of contact person __________________________________

1. Did your school district receive the Environmental Protection Agency's (EPA) Guidance Document "Lead in School Drinking Water" in the Spring of 1989?

Yes ___ No ___

2. Has a program to assess the potential for lead in your school's drinking water been started?

Yes ___ No ___

IF YOU ANSWERED NO TO THIS QUESTION, YOU NEED NOT COMPLETE THE REMAINDER OF THE QUESTIONNAIRE, MERELY SIGN THE FORM ON PAGE 3 AND RETURN TO THE ADDRESS INDICATED.

3. If you conducted a sampling program for lead in drinking water, please complete the following questions: (If you have a report of activities of a sampling program, you may attach at the end of the questionnaire).

Page 1
A. Approximately how many samples did you collect? 

B. How many first draw samples collected were above 15 ppb? 

C. How many flushed samples collected were above 15 ppb? 

4. Approximately how many of the schools coolers were on the EPA list of lead-lined coolers? 

5. Did the manufacturer replace, refund or give a rebate on the purchase of a new cooler? Yes __ No __ Other __

6. Were school staff and parents notified of the lead in drinking water assessment? Please check those that apply.

Not notified 

School newsletter 

PTA Bulletin 

Union Bulletin 

Public Notice 

Other 

7. Please check below remediation measures undertaken to reduce exposure to lead in school drinking water.

- Bottled Water 
- New pipes or solder 
- Replacement of cooler(s) 
- Remove water outlet from service 
- Daily flushing of lines 
- Other 

8. Please feel free to make any other comments you wish regarding lead in school drinking water:

_____________________________________________

_____________________________________________

_____________________________________________
9. Name, address and telephone number of laboratory contracted to analyze samples:

Name:______________________________

Address:__________________________________________

Phone:__________________________________________

Contact Person filling out questionnaire:

Name:______________________________

Title:__________________________________________

Date:______________________________

Signature:__________________________________________

Please return to:

Ms. Patricia A. Roth
Lead Program Coordinator
Bureau of Public Water Supply Protection
New York State Department of Health
2 University Place - Room 406
Albany, NY 12203

Phone: (516) 231-1880 or (518) 458-6731
April 20, 2004

Mr. Benjamin Grumbles  
Acting Assistant Administrator  
Office of Ground Water & Drinking Water  
United States Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

Dear Mr. Grumbles:

Thank you for your March 18, 2004, letter regarding New York's efforts to monitor and protect children from exposure to lead in drinking water. Staff was alerted to the issues related to the elevated levels of lead in drinking water in Washington, D.C. prior to receiving your letter, and have begun a review and evaluation of efforts to control lead in the State's drinking water systems.

Staff of the Department's Bureau of Water Supply Protection (BWSP) will be directly providing you with information regarding on-going measures as well as future anticipated actions to control lead in drinking water at schools and day care facilities. Staff will also be providing information regarding an effort with Environmental Protection Agency Region 2 staff that may provide a useful model of successful collaboration as it relates to this issue. I anticipate that your May 1, 2004, deadline for the transmittal of requested information will be met.

Feel free to have your staff contact Mr. Ronald Tramontano, Director of the Center for Environmental Health at (517) 402-7500 for additional information.

Sincerely,

Antonia C. Novello, M.D., M.P.H., Dr. P.H.  
Commissioner of Health

cc: R. Tramontano
April 30, 2004

Mr. Benjamin H. Grumbles
Acting Assistant Administrator
US Environmental Protection Agency
Washington, D.C., 20460

Subject: Lead in school drinking water

Dear Mr. Grumbles,

This letter is in response to your letters of March 18, 2004 to Carmen Hooker Odom, Secretary of the North Carolina Department of Health and Human Services, and William G. Ross, Secretary, Department of Environment and Natural Resources (DENR) regarding efforts the state has been taking to reduce lead exposure in schools.

North Carolina has approached this issue under the requirement of the Safe Drinking Water Act (SDWA). The Division of Environmental Health’s Public Water Supply Section in the Department of Environment and Natural Resources is the primary agency for the SDWA. They are aware of no specific actions on this issue other than those specified in the SDWA. Accordingly, since the late 1980’s when all schools dealt with water coolers containing lead, no specific actions have been taken by the Public Water Supply Section for schools that are not regulated as public water systems. Schools that are regulated as non-transient, non-community water systems under the SDWA must comply with the requirements of the lead and copper rule. If schools are discovered to have lead problems from their compliance monitoring, the Department of Public Instruction may also help with planning and design to address the issue.

One concern expressed in your letter that North Carolina shares is the knowledge that changing the water chemistry of the water will commonly have implications on corrosion control, and therefore lead levels. With the changes that will be coming for smaller systems related to disinfection byproduct compliance, many systems will be required to adjust their water chemistry. Knowing that there are implications and balancing necessary to comply with multiple sets of rules will not necessarily make it easier for the systems to comply. EPA should anticipate systems having exceedences for lead while they adjust the treatment strategy for other rules. The question remains of how fast will these systems be able to find the new balance for full compliance. The state will work with these systems to achieve compliance as quickly as possible.
Mr. Benjamin H. Grumbles  
April 30, 2004  
Page 2

You asked a question about how EPA could work collaboratively to further our state efforts to implement a voluntary program to reduce lead exposure in schools. Several years of budget cuts coupled with increasing federal requirements have resulted in a Public Water Supply State Supervision program focused on maintaining compliance with the core SDWA mandates. Voluntary activities, however worthwhile, are currently beyond program means.

I hope you find this information useful.

Sincerely,

[Signature]

William G. Ross

[Signature]

Leah M. Devlin, DDS, MPH  
State Health Director

cc:  Terry Pierce, NC DEH  
     Chris Thomas, EPA Region 4  
     Linda Raynor, PWS  
     John Kuchnia, DPI
April 22, 2004

Cynthia C. Dougherty, Director
Office of Ground Water and Drinking Water
USEPA
1200 Pennsylvania Avenue NW
Washington, DC 20460

Dear Ms. Dougherty:

Acting Assistant Administrator Grumbles has asked that we update you on the status of programs we may have in place to control lead in drinking water for schools and daycare facilities.

The state of North Dakota did implement and administer the Lead Contamination Control Act (LCCA) of 1988. From its inception we worked very closely with public, private, and parochial schools and public and private daycares through a monitoring and education effort. Unfortunately, the program did not enjoy the success we typically see in other drinking water rule initiatives. There were a number of contributing factors including:

1. A massive education process when regulating entities not previously regulated for drinking water reasons.

2. Identifying and inventorying a somewhat unregulated segment of society. Many of the privately owned and operated daycares were unregulated at the time of the LCCA and therefore virtually impossible to identify.

3. Funding to help defray the cost of implementing and administering the LCCA was originally promised by the EPA, but that funding never was provided.

4. The LCCA was a voluntary program and without an enforcement component it became very difficult to achieve compliance from the regulated community, especially the daycares.

Due to the above factors and the following reasons, the state of North Dakota decided to abandon all but the technical assistance portion of the program:

1. The state had adopted and implemented the lead ban in the State Plumbing Code which placed prohibitions on lead materials used in plumbing.
2. The LCCA recalled drinking water coolers with lead-lined water reservoir tanks and banned new drinking water coolers with lead parts.

3. The lead/copper (Pb/Cu) rule of the 1986 Safe Drinking Water Act (SDWA) amendments was adopted by the state.

4. The Pb/Cu rule required a more aggressive action limit of 15 ppb for lead than the 20 ppb limit of the LCCA.

5. Schools were regulated under the Pb/Cu rule as part of a community water system or as a nontransient noncommunity water system if they have their own water source.

6. We had been very active in making ourselves available to schools and daycares and they were aware of our continued willingness to provide technical assistance.

7. We felt public health protection was adequately provided through the Pb/Cu rule of the SDWA.

With regard to a collaborative effort to implement a new voluntary program, the key to a successful voluntary program will be resources, both human and financial. The EPA must be willing to create new additional funding through the Public Water System Supervision (PWSS) grants. But for a program to be truly successful, it must be established as a mandatory program, complete with an enforcement and compliance component, and then adequately funded through the PWSS grants.

Thank you for the opportunity to comment.

Sincerely,

[L. David Glatt, Chief]
Environmental Health Section

LDG/JL:db

cc: Larry Thelen, Drinking Water Program Administrator
    Tracy Eagle, Region VIII, EPA
    Anthony Deloach, Region VIII, EPA
April 15, 2004

Mr. Benjamin Grumbles
Acting Assistant Administrator for Water
United States Environmental Protection Agency
Office of Water (4101M)
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Dear Mr. Grumbles:

I am writing in response to your March 18, 2004 inquiry concerning measures being taken to control lead in drinking water for schools and day care facilities in Ohio. While the State of Ohio does not have a statewide program directed exclusively at lead in drinking water at schools and day care facilities, there are a number of State and local programs that address lead in drinking water as part of their overall efforts to reduce lead exposures.

As you noted in your letter, lead in drinking water is regulated through the Lead and Copper Rule. The State of Ohio's Lead and Copper Rule became effective in September 1993 and closely mirrored the federal Lead and Copper Rule. Ohio's revisions to the Lead and Copper Rule became effective on October 17, 2003 and again closely mirrored the federal Lead and Copper Rule, with the exception that Ohio chose to be more stringent and did not adopt the nine year monitoring waiver.

In accordance with these rules, Ohio requires all community and non-transient non-community public water systems (PWS) to monitor for lead and copper in their distribution systems. This includes 469 schools and day care facilities that operate their own PWS. Ohio carefully tracks lead and copper monitoring performed by these PWSs and reports any lead and copper monitoring violations to U.S. EPA. Ohio also tracks PWSs that exceed the lead and/or copper action levels. If a PWS exceeds a lead and/or copper action level, the state of Ohio requires the system to implement the treatment steps listed in Ohio Administrative Code (OAC) Rule 3745-81-81, and deliver public education materials as required in OAC Rule 3745-81-85.

Some schools and day care facilities are served by larger PWS. The owners and operators of these PWSs may choose to sample schools and day care facilities as a part of their required lead and copper monitoring, although this would not be common. Ohio strictly requires PWSs to choose the lead and copper monitoring sites as per OAC Rule 3745-81-86 (A)(3). This rule uses the same language found in the 141.86 (a) of the federal regulations. It should be noted that when choosing lead and copper sampling sites, PWSs must use sites that meet the criteria of a "tier 1" type site if they are available. These sites by definition are single family dwellings.

Bob Taft, Governor
Jennette Bradley, Lieutenant Governor
Christopher Jones, Director

Ohio EPA is an Equal Opportunity Employer
As the preliminary results of the Center for Disease Control’s investigation into the health effects of the elevated lead levels in Washington D.C.’s drinking water shows, drinking water might contribute to a small increase in blood lead levels. However, exposure of children to lead from lead-based paint and lead contaminated dust remain the primary concern of health care professionals. There are several programs and councils in Ohio working to reduce lead poisoning in children from exposure from sources other than drinking water.

The Ohio Childhood Lead Poisoning Prevention Program (OCLPPP) housed within the Ohio Department of Health (ODH) provides program funding, public and professional education, environmental consultation and investigation, case management, and data collection and analysis. The program addresses the needs of children from birth through age 6 years and their families with an emphasis on children from birth through age 2 years. The program is the lead agency for the Centers for Disease Control and Prevention childhood lead poisoning prevention efforts in Ohio.

The OCLPPP collects all laboratory blood lead screening reports and provides data analysis and reporting to the federal government. For children with elevated blood lead levels, state or local sanitarians provide home visits to determine the source of a child’s lead poisoning. All possible sources of lead exposure are explored and all sites where the exposure may occur including day care facilities, preschools, or other care givers residences are considered. The need for investigation of the water supply as a source for lead would be determined during a site investigation.

The OCLPPP also provides funding to local health agencies for four lead Regional Resource Centers (RRC) and nine major metropolitan area programs. The RRCs provide lead poisoning prevention resources to the region and work to identify children exposed to lead hazards and assure appropriate follow-up care.

Since 1992, Ohio EPA has been a designated member of three committees charged with the responsibilities of studying and proposing a comprehensive state plan, including legislation, to address lead prevention and control issues. In January 2003, Ohio updated its lead regulations with the signing of Substitute House Bill 248 by Governor Taft. Of relevance to the issue of lead in school facilities, the bill:

- promotes data harmonization between ODH and the Ohio Department of Jobs and Family Services (ODJFS), which licenses day care facilities and child care providers;
- creates an advisory council to the Child Lead Poisoning Prevention Program;
- establishes requirements for investigation and risk assessment of a residential unit, day care facility, or school that may be the source of a child’s lead poisoning; and,
- describes essential maintenance practices for day care facilities and schools for preventive measures.
Mr. Benjamin Grumbles  
Page Three  

The current committee, the Ohio Childhood Lead Advisory Council, is working to assist in the ongoing development and implementation of the child lead poisoning prevention program created under Ohio Revised Code Section 3742.31. The council will provide an annual report of the State's activities to the Governor beginning in 2004.

In closing, I want to express my concern that the current increased attention being given to lead in drinking water will cause unnecessary additional burden on state drinking water programs. I understand U.S. EPA is under Congressional pressure to determine that this is a localized problem and to evaluate the lead rule to ensure it is adequate to protect public health. I further understand that U.S. EPA needs information from states to make these determinations. I can report that my staff has already provided the requested information to Region V. I urge you and your staff to consider the burden on state programs when making future requests. I will also share my concern that the Congressional request could result in unnecessary rule changes. The problem in Washington D.C., while a concern, is not the result of a flawed rule, but rather, the result of failed implementation.

Please contact Michael Baker, Chief of the Ohio EPA Division of Drinking and Ground Waters (614-644-2752) if you have any questions on the above information.

Sincerely,

Christopher Jones  
Director

cc: Michael Baker, Chief, DDAGW
April 16, 2004

Mr. Benjamin Grumbles  
Acting Assistant Administrator  
United States Environmental Protection Agency  
Washington, D. C. 20460

Dear Mr. Grumbles:

This letter is in response to your recent inquiry regarding the regulation of lead in Oklahoma. The Oklahoma Department of Environmental Quality has primary enforcement responsibility for the Safe Drinking Water Act and we began to aggressively implement the Lead and Copper Rule immediately after its promulgation. In addition, we implemented the requirements of the Lead Contamination Control Act (LCCA) of 1988.

During 1989 and 1990, in collaboration with the Oklahoma Department of Education and the Oklahoma Department of Human Services, our staff contacted each school and daycare facility in the state and informed them of the recall of specific water coolers potentially containing lead-lined reservoir tanks. We also urged them to collect water samples for lead analysis in accordance with the guidance provided by the Environmental Protection Agency (EPA). Our State Environmental Laboratory provided analysis for 1745 of the samples. We followed up on the isolated problems revealed by this sampling and the issues were addressed by the schools by replacement of plumbing, etc.

Even though the LCCA did not call for continued sampling for lead at schools, some on-going monitoring for schools has been continued through the implementation of the Lead and Copper Rule by public water supply systems. Schools and daycare facilities that have their own water supply and are classified as non-transient non-community or non-community water supplies are monitored under our regular lead and copper monitoring program.

Our state has sixty-five schools and daycare facilities with their own water systems. Currently we have only one school in Oklahoma with its own water system that exceeds the lead action level. That school is under state enforcement actions and has been providing bottled water to the children for four years as the school attempts to obtain a permanent correction to bring them into compliance with the Lead and Copper Rule.

Oklahoma has 1281 community and non-transient non-community water systems subject to the Lead and Copper rule. We currently have only two water systems under enforcement orders for
lead exceedances. This includes the above-mentioned school. Our agency has not seen any
wide-spread problem with lead contamination of our public water systems or our schools under
our current lead and copper monitoring program. Much of Oklahoma has hard water and is non-
corrosive. We have no indication that a special monitoring program would be warranted to
investigate potential lead contamination in Oklahoma.

I hope this information is helpful to you as you evaluate the extent of the problem nationwide.
Feel free to contact us if you have need of further information.

Sincerely,

Steven A. Thompson
Executive Director
March 30, 2004

Mr. Benjamin H. Grumbles, Acting Assistant Administrator
Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Dear Mr. Grumbles:

You recently sent Stephanie Hallock, Director of the Oregon Department of Environmental Quality, a letter requesting information regarding state programs to control lead in school drinking water. Director Hallock asked me to get back to you.

The Oregon Department of Environmental Quality is not involved with this type of program in Oregon. Rather, this responsibility falls to Oregon’s Department of Human Services (DHS), Health Services Division.

I spoke with David Leland, Manager of the Drinking Water Program at DHS. DHS is charged with assuring Oregonians have safe drinking water. They also received your letter and are preparing a response.

If you’d like to contact Mr. Leland directly, he can be reached at:

Drinking Water Program
Office of Public Health Systems
Department of Human Services - Health Services
800 NE Oregon St., Rm 611
Portland OR 97232
Phone: (503) 731-4010
email: david.e.leland@state.or.us
Drinking water website: www.ohd.hr.state.or.us/dwp

If there is anything further I can do to help you obtain the information you need, please let me know.

Sincerely,

Holly Schroeder; Administrator
Water Quality Division

Cc: David Leland, DHS
April 7, 2004

Benjamin H. Grumbles
Acting Assistant Administrator
USEPA
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for your inquiry of March 18, 2004, about the Lead Contamination Control Act of 1988 (LCCA) and our efforts in Oregon to assist in implementing that federal Act.

The Department of Human Services (DHS) redirected resources from its public drinking water program to carry out the state responsibilities mandated in the Act. We distributed the Guidance Document and Testing Protocol and associated EPA documents to Oregon School Districts through the Oregon Department of Education, and also distributed those materials to daycare centers through our Department. Drinking water program staff conducted five regional training events for Oregon school district personnel. Our staff provided consultation with schools and daycare facilities as they conducted their initial testing for lead in their drinking water. While the Act did not specifically require schools and daycare centers to submit their test results either to EPA or to DHS, we are aware from conversations with Oregon laboratories that a considerable amount of testing was indeed done in response to the LCCA.

The LCCA documents remain available on our website, and in recent years we consulted with several school districts that updated their testing. We provided additional informational updates to school districts, again through the Oregon Department of Education.

If you have additional questions or require further information, please contact Dave Leland, Drinking Water Program manager, at 503-731-4010.

Sincerely,

Gary K. Weeks
Acting Director

"Assisting People to Become Independent, Healthy and Safe"
An Equal Opportunity Employer
Mr. Benjamin H. Grumbles  
Acting Assistant Administrator  
Office of Water  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Mr. Grumbles:

Thank you for your letter regarding state programs to control lead in school drinking water. Since the passage of the federal Lead Contamination Control Act (LCCA), the Department of Environmental Protection in conjunction with the Departments of Education and Public Welfare has conducted training seminars and provided information packets to the public. The enclosed letter from Cathy Curran Myers, Deputy Secretary for Water Management, will provide more information regarding these efforts.

If you need further information, please contact John Hines of Deputy Secretary Myers’ staff by phone at 717-783-4693 or by e-mail at johines@state.pa.us.

Sincerely,

Kathleen A. McGinty  
Secretary

Enclosure  

Hope all is well!
Office of Water Management

Mr. Benjamin H. Grumbles
Acting Assistant Administrator
Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Mr. Grumbles:

I am responding to your letter regarding state programs to control lead in school drinking water. Since passage of the federal Lead Contamination Control Act (LCCA), the Department of Environmental Protection (DEP) has mailed information packets to nearly 7,500 schools and day care centers in Pennsylvania in cooperation with the Departments of Education and Public Welfare. In addition, DEP staff conducted thirty-four (34) statewide training seminars for school and day care center administrators and maintenance staff. A link on DEP’s website to various lead-related EPA guidance documents has also been established.

To further protect our citizens from new sources of lead exposure, the Commonwealth enacted “The Pennsylvania Plumbing System Lead Ban and Notification Act (Act 1989-33)” in 1989. As a result of that Act, DEP conducts surveillance and enforcement activities to ensure that lead plumbing solder is not sold or used. These on-going efforts provide added protection against plumbing repairs or new work being done with lead solder.

As a result of these and other efforts, a number of schools and day care facilities identified water coolers that had lead-lined tanks and replaced them. In addition, schools that found problems with high lead levels at other fixtures, as a result of their voluntary testing, quickly took steps to replace the plumbing materials that caused the elevated lead levels.

About 10 percent of the schools in Pennsylvania are public water systems. Lead problems in these schools are handled the same as with any public water system. Beyond the mailing and training efforts and technical assistance when elevated lead levels were found in water coolers or other fixtures, our involvement has been constrained due to a lack of federal funding for this program.
We continue to support EPA Region III staff in its on-going response efforts with schools experiencing elevated lead levels. In the case of the Philadelphia schools, the Philadelphia Water Department met the lead and copper action level requirements while fixtures and water fountains in various school buildings exhibited elevated first-draw lead levels. In this case, efforts were expended to get the city’s schools’ sampling and remediation program into operation and to see it through to completion.

If you need further information, please contact John Hines of my staff by phone at 717-783-4693 or by e-mail at johines@state.pa.us.

Sincerely,

[Signature]

Cathy Curran Myers
Deputy Secretary for Water Management
May 14, 2004

Mr. Benjamin Grumbles  
Acting Assistant Administrator  
Office of Water  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  

Dear Mr. Grumbles:

The Pennsylvania Department of Health (DOH) takes an active role in reducing the risk of lead exposure to children from all sources, including lead-based paint and drinking water. Under the regulations 28 Pa. Code, Chapter 27, laboratories performing blood lead tests on children under the age of sixteen are required to report all test results to the DOH. In addition, all health care providers are required to report cases of lead poisoning in children under the age of sixteen and in pregnant women to DOH.

The DOH currently funds ten local community-based Childhood Lead Poisoning Prevention Projects (CLPPP) serving targeted identified high-risk areas. CLPPP projects provide comprehensive childhood lead poisoning prevention and control services. In addition, DOH field staff personnel provide tracking and case management to children in non-CLPPP project areas. DOH also provides a statewide toll-free Lead Information Line (1-800-440-LEAD) to respond to caller inquiries and provide written materials about childhood lead poisoning.

In 1989, Pennsylvania’s Plumbing System Lead Ban and Notification Act took effect, placing a ban on the sale or use of plumbing solders and fittings or fixtures that contain lead. Since then, the Pennsylvania Department of Environmental Protection (DEP), in conjunction with EPA, has presented a series of workshops to school and day-care center officials on the sources of lead in drinking water that could be found in their facilities. In addition, DEP has conducted periodic surveillance at hardware stores, wholesale plumbing suppliers, and home centers to ensure that lead-free plumbing is sold in Pennsylvania.
Pennsylvania’s drinking water regulations were revised in 1994 to be as stringent as the federal Lead and Copper Rule. DEP continues to regulate all public water systems that may serve residential areas, schools, and day-care centers. Regulated public water systems are required to routinely test for lead in their source water as well as for the tendency of the water to corrode metal pipes and fixtures. While DEP has not found lead in source water to be a significant problem in Pennsylvania, if the source water is corrosive, the public water system is required to treat its water to make it noncorrosive. For more information on this program, you may contact DEP at (717) 772-4018.

Thank you for your interest in Pennsylvania’s Childhood Lead Prevention Program. If you have any additional questions, please contact the Lead Information Line at 1-800-440-LEAD.

Sincerely,

[Signature]

Michelle S. Davis
Deputy Secretary for Health
Planning and Assessment
April 28, 2004

Mr. Benjamin H. Grumbles  
United States Environmental Protection Agency  
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for your interest in Puerto Rico’s lead control efforts in drinking water for schools and day care facilities. While the Puerto Rico Department of Health has initiated awareness campaigns to increase water safety for the general population, there are currently no programs specifically addressing lead control in drinking water for schools and day care facilities.

The Puerto Rico Department of Health is interested in collaborating with EPA to implement lead control programs for schools and day care facilities. The Department of Health is committed to investigating current levels of lead in water, defining interventions, if and when necessary, and reducing the potential for lead contamination in schools and day care facilities. Based on the 1988 Lead Contamination Control Act (LCCA), the Department of Health will make recommendations to the Office for Improvement for Public Schools regarding recalled water coolers containing lead. The Department of Health will also inform the Office for Improvement for Public Schools of the importance of utilizing lead-free pipes when constructing and/or renovating school facilities. The Department of Health will identify laboratories in Puerto Rico with the capacity to test water samples and determine lead content.

The Puerto Rico Department of Health is interested in receiving further information regarding EPA’s voluntary lead control program for schools and day care facilities and looks forward future collaboration.

Sincerely,

Francisco Alvarado-Ramy, M.D.  
Acting State Epidemiologist  
Puerto Rico Department of Health
Safe and Healthy Lives in Safe and Healthy Communities

April 30, 2004

Benjamin H. Grumbles
Acting Assistant Administrator
Office of Water
Environmental Protection Agency
Washington, D.C. 20460

Dear Mr. Grumbles:

The Director of Health, Dr. Patricia A. Nolan, has referred your letter received on March 26, 2004 to me for response. First, as general background information on the occurrence of lead in Rhode Island’s drinking water, I am pleased to report that all of Rhode Island’s large and medium sized public water systems are in compliance with the federal lead action level. However, with regard to lead in drinking water at schools and day care facilities specifically, the State is not currently implementing a program to control lead levels. Some monitoring and protective actions were taken in the past. All of the State’s schools had lead in drinking water testing conducted during the spring of 1991 as required by the Lead Contamination Control Act of 1988. Schools showing levels in excess of 5 parts per billion were notified and advised to begin flushing water lines each morning as well as to evaluate and remove sources of lead in plumbing as soon as possible. Formal monitoring of compliance with these recommendations was not conducted; however, Drinking Water Quality Office staff that worked on the project indicates that the recommendations were followed and in many instances additional sampling was conducted.

The State is now considering the possibility of sampling day care facilities as well as re-sampling schools that showed levels above 15 parts per billion in 1991. Upon completion of the sampling, facilities would be provided with results along with recommendations and /or general information on lead in drinking water.

As for a collaborative effort with EPA, the Department of Health would seek assistance in the form of supplemental funding and guidance on the design and implementation of a cost effective, statistically significant study of flushing/sampling programs in large buildings such as schools. The State envisions a study focusing on the effects of temperature and time of travel of drinking water from main to remote taps in facilities and what affect these play on effective flushing and representative sampling programs. For example, does a drop in water temperature at a remote tap in an elementary school indicate that the line feeding it has been adequately flushed? Is an analysis at this same tap showing compliance with the lead action level representative of lead in drinking water levels throughout the facility? It would be extremely helpful to have this information in hand prior to initiating the aforementioned sampling.

CANNON BUILDING, Three Capitol Hill, Providence, Rhode Island 02908-5097
Hearing/Speech Impaired, Dial 711 or Call 1-800-745-5555 (TTY)
Web Site: www.healthri.org
As you are aware, even when public water systems are in compliance with the federal lead action level, it is still possible for suppliers to have individual problem sites in their service areas. Required lead in drinking water monitoring along with sampling conducted by the Environmental Lead Program in the Department of Health has revealed that problem sites exist even though particular water systems are in compliance with the lead action level. When sites such as this are identified, the public water supplier serving that site is notified, and generally conducts follow-up sampling, provides education regarding lead in drinking water and if the situation warrants, works with property owners to replace lead service lines in response to elevated lead levels. These actions are not required under the Lead and Copper Rule and consequently are not monitored by the State.

Health’s Drinking Water Quality Office is very cognizant of the potential effect on lead concentrations in drinking water from changes in treatment practices and continues to scrutinize all changes to public water system treatment, storage or pumping to ensure that corrosion control is not compromised.

Health thanks you for the opportunity to comment on this important issue. Please contact me at 401-222-7781 if you or your staff requires any additional information.

Sincerely,

June A. Swallow, P.E.
Chief
Office of Drinking Water Quality
Department of Health

Cc: Patricia A. Nolan, MD, MPH
    Walter S. Combs, Jr., PhD
April 12, 2004

Mr. Benjamin H. Grumbles
Acting Assistant Administrator
Office of Water
United States Environmental Protection Agency
Washington, D.C. 20460

RE: Lead in drinking water in schools and day care facilities

Dear Mr. Grumbles,

In response to your letter regarding the referenced subject, I offer the following information:

The South Carolina Department of Health and Environmental Control (DHEC) does not have an ongoing program that specifically addresses lead in drinking water in schools and day cares in our state. However, there are numerous activities in our other programs that address this issue.

Day Care Facilities

In South Carolina, day care facilities are licensed and regulated by the Department of Social Services (DSS); DSS regulations require that these facilities be free of lead hazards. Under a verbal agreement with DSS, the Department provides safety and sanitation inspections in these facilities. As part of these inspections, we conduct lead hazard risk assessments in facilities built prior to 1978, or otherwise have a history that would indicate the possible presence of lead hazards. Testing the water supply in these facilities, especially those supplied by wells, is a part of that risk assessment.

Schools

The Department does have regulatory authority over school sanitation in our state. However, due to budget constraints, we are unable to conduct routine inspections of school facilities; these facilities are inspected when we receive complaints on conditions in them. When warranted, water samples are collected and submitted to our laboratory for analysis. We work with local school districts, at every opportunity, to ensure the safety of students and faculty.

Childhood Lead Poisoning Prevention Program (CLPPP)

The agency houses a Childhood Lead Poisoning Prevention Program, which is funded through a cooperative agreement with the Centers for Disease Control and Prevention. In addition to conducting surveillance and case management activities, the CLPPP has a strong outreach component. The CLPPP provides educational materials, presentations, and training upon request to a variety of groups, including school nurses, parent-teacher...
Mr. Benjamin H. Grumbles  
April 6, 2004  
Page 2

organizations, and students. The CLPPP has conducted a pilot project in an elementary school to raise awareness of lead poisoning and its prevention. Lead hazards from a variety of sources are discussed, including drinking water. If the CLPPP is unable to provide the necessary information or technical assistance, a referral may be made to the agency's Bureau of Water or to our regional EPA office, or EPA's Safe Drinking Water hotline.

Bureau of Water

The agency's Bureau of Water has disseminated information to schools and school districts throughout the state regarding lead in water, water fountains, etc. The Bureau continues to consult with, and provide technical assistance to, schools and school districts on a case-by-case basis regarding lead in drinking water. The Bureau also routinely samples water supply systems where schools have their own water source and supply system.

Hopefully, this adequately answers questions you may have regarding our Department's involvement in this issue. Please be aware that school facilities in South Carolina are also under the authority of the South Carolina Department of Education, Office of School Facilities; in the event that they may have information that would be useful to you, I am forwarding a copy of this response, as well as a copy of your letter, to Mr. Alex James, the director of that office. Thank you.

Respectfully yours,

C. Earl Hunter  
C. Earl Hunter, Commissioner

HML/CEH

cc: Mr. Alex James, SC Department of Education, Office of School Facilities  
Ms. M.L. Tanner, Director, Childhood Lead Poisoning Prevention Program  
Mr. Joe Rucker, Assistant Bureau Director, Bureau of Water  
Mr. Roger D. Scott, RS, Director, Bureau of Environmental Health  
Mr. Richard L. Hatfield, Assistant Deputy Commissioner, Public Health Services
April 12, 2004

Benjamin Grumbles, Acting Assistant Administrator
US EPA - Office of Water
1200 Pennsylvania Avenue, NW
Washington DC 20460

Dear Mr. Grumbles:

Thank you for your recent letter asking about South Dakota’s efforts to monitor and protect children in school from exposure to lead in drinking water. The U.S. Environmental Protection Agency has delegated the South Dakota Department of Environment and Natural Resources (DENR) primacy for implementing the federal drinking water program in South Dakota. According to our records, the last time we had a regulated public drinking water system violate the action level for lead was during 1999. Since that time, all of our regulated drinking water systems have been meeting the action level for lead. Because nearly all schools in South Dakota are hooked up to these regulated drinking water systems, this data indicates that safe drinking water is being delivered to them. However, as you know, it is important to have data from water samples taken inside school buildings because plumbing systems, water coolers, and water fountains that have lead components can all add lead to the water.

DENR undertook a project in 1993 and 1994 to provide local school officials with data about environmental conditions inside schools. This project was called the South Dakota Environmentally Safe School Initiative. Accredited public, private, parochial, Native American, and special education school districts were contacted and asked to participate by having school district staff sample their occupied buildings for lead and copper in the drinking water and radon in the indoor air. Participation was voluntary and DENR at that time had some special one-time funding to pay for the laboratory testing costs.

During the initiative, a majority of the schools in South Dakota collected first draw water samples from drinking fountains to be tested for lead. For those samples that tested high, DENR provided a free re-test to determine if the high lead levels were coming from outside the school building or from lead sources inside the school. For those water foundations and coolers that tested high, DENR provided grant funds to help schools replace those fountains and coolers.

You asked how can EPA and the state work collaboratively to further ensure drinking water in schools has safe lead levels. Based on our experience with the South Dakota Environmentally Safe School Initiative, DENR has two suggestions.
First, if EPA is contemplating a national effort to determine lead levels in drinking water in schools, EPA must include the states in developing that effort. States can provide valuable input into the mechanics of how such an effort can work. Furthermore, there must be federal funding to pay for all the work. States and local school district budgets simply can not absorb the costs that would be associated with a new federal initiative of this nature.

A second idea would be to revise the current federal lead and copper monitoring requirements to allow regulated drinking water systems to collect samples from schools and other buildings rather than from just residences. This would allow public drinking water systems, EPA, and the state to use an existing drinking water program to gather more lead data from inside school buildings on an on-going basis without increasing costs. While we advocate this change to provide regulated drinking water systems greater flexibility in conducting monitoring under the lead and copper rule, DENR would oppose requirements making sampling of drinking water inside schools mandatory. A mandate dictating sampling of school taps is impracticable, unnecessary, and would be impossible to enforce.

Thank you again for asking states to provide this information, and I hope you find our comments useful.

Sincerely,

[Signature]

Steven M. Pirner
Secretary

cc: Doneen Hollingsworth, Secretary, South Dakota Department of Health
    Rick Melmer, Secretary, South Dakota Department of Education
    Roxy Everson, Governor’s Office
    Steve Brown, ECOS
    Kathy Dolan, EPA Region VIII
April 16, 2004

Mr. Benjamin H. Grumbles
Acting Assistant Administrator
United States Environmental Protection Agency
Office of Water
Washington, DC 20460

Dear Mr. Grumbles:


After passage of the Lead Contamination Control Act (LCCA) of 1988, the Division of Water Supply in the Department of Environment and Conservation worked very closely with the Departments of Education and Human Resources to educate and provide technical assistance to school administrators and day care operators on the provisions of the Act. Information was obtained from the Department of Education on all public and private school administrators in the state. Information was sent to each school administrator about the need to monitor the school water for lead. Also included in the information was the sampling protocol for sampling lead in school water systems.

A list of all coolers and fountains that the EPA had identified as containing lead components was sent to each school administrator along with information regarding contacting the manufacture to replace the cooler or drinking fountain.

Arrangements were also made to provide direct training to both the school administrators and school maintenance supervisors on the hazards of lead in school water systems and how to establish a school lead sampling program. These technical training sessions were held across the state and every school system was encouraged to establish a lead sampling program.

While many but not the majority of school systems sent the Division of Water Supply a copy of the school lead sampling results, the results submitted did not show lead to be a problem in those schools.
The same information sent to school administrators and maintenance supervisors was also sent to all day care owners/operators licensed by the state. Technical training sessions were also conducted for daycare owners/operators and they were encouraged to conduct a lead sampling program in the daycare facility. No lead sampling results from daycare facilities were submitted to the Division of Water Supply.

The Division of Water Supply did not establish a program to continue with this specific training and sampling program. This decision was left to the Departments of Education and Human Resources and local school administrators and daycare owners. Since the federal government did not provide any funding to the state under the LCCA, any cost with continuing a lead sampling program in schools and daycare facilities would have to be borne by the state, school system and/or daycare owner. Even though the state did not continue a specific sampling program under the LCCA, the Division of Water Supply provided technical assistance to school systems and daycare owners/operators when requested to do so. The Division is not aware of any such requests being made in the past 5 or 6 years.

Public water systems are required to meet the requirements of the lead and copper rule and to provide water meeting optimum corrosion control treatment. Operational reports are reviewed each month to insure water suppliers are meeting requirements established for their system. Any change in the treatment process that may affect the lead and copper level requires the system to increase its monitoring to insure that optimum corrosion control treatment is being maintained.

The Department of Environment and Conservation does not plan to increase its activity in this area. If requested by the Department of Education or Human Resources or a local school official or daycare owner, the Division of Water Supply will provide technical assistance on how to establish a lead sampling program.

If I can be of further assistance to you in this matter, please let me know.

Sincerely,

W. David Draughon, Jr.

Cc: Ms. Karen Stachowski
April 16, 2004

Mr. Benjamin H. Grumbles  
Acting Assistant Administrator  
United States Environmental Protection Agency  
Office of Water  
Washington, DC 20460

Dear Mr. Grumbles:

Dr. Wendy Long, Deputy State Health Officer, requested that I respond to your letter of March 18, 2004.

The Tennessee Department of Health currently is not involved with a program to control lead in drinking water for schools and day care facilities. However, the Tennessee Department of Environment and Conservation, Division of Water Supply, has done a great deal with this issue. I refer you to their letter dated April 16, 2004, from David Draughon, Jr..

Sincerely,

Bonnie S. Bashor  
Director, Environmental Epidemiology  
Communicable and Environmental Disease Services

cc: Wendy Long, MD  
    Allen Craig, MD
Benjamin H. Grumbles  
Acting Assistant Administrator  
United States Environmental Protection Agency  
Washington, D.C. 20460

Dear Mr. Grumbles:

I received your letter of March 18, 2004 outlining your concern regarding children’s health issues associated with lead in drinking water at schools and day care facilities. The Texas Department of Health (TDH) appreciates your vigilance and concern as a public servant. At TDH we take childhood blood lead issues very seriously and have made a commitment to eliminate childhood lead poisoning in Texas.

The issue that you raise deals with drinking water supplies in Texas. Since 1992, the Texas Commission on Environmental Quality (TCEQ) has been the principal state agency that regulates public drinking water supplies in the State of Texas. While we work with TCEQ to support safe drinking water for all Texans, TDH is not aware of any committees or work groups specifically focusing on the issue of lead in drinking water in schools and day care facilities. To our knowledge, other than the problem identifying lead-lined water cooler reservoirs in 1988, lead in drinking water at schools has not been identified as an issue in Texas.

Regardless of whether these facilities have their own water system or obtain their water from a public water system, such as a municipal or city water supply, it is our understanding that they would be subject to EPA’s Lead and Copper rule. For specific water quality information I would have to refer you to the TCEQ Public Drinking Water Section at (512) 239-6020 or (512) 239-4691.

Although there are no committees or work groups specifically focusing on lead in drinking water in schools and daycare facilities. As part of the lead poisoning prevention program in Texas, TDH has established a Lead Work Group which meets quarterly to
discuss strategies to eliminate lead poisoning. Your agency (the U.S. Environmental Protection Agency) as well as the Agency for Toxic Substances and Disease Registry (ATSDR), housing authorities, and Texas Housing and Urban Development (HUD) grantees, are participants in this work group.

If you or your staff have any further questions regarding child lead poisoning prevention efforts in Texas, please contact John F. Villanacci, PhD, EMT or Teresa Willis at (512) 458-7269. Dr. Villanacci is the Director of our Environmental Epidemiology and Toxicology Division. Ms. Willis is the coordinator of our childhood lead poisoning prevention program.

Sincerely,

Eduardo J. Sanchez, M.D., M.P.H
Commissioner
Mr. Benjamin H. Grumbles
Acting Assistant Administrator
United State Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Mr. Grumbles:

Thank you for your recent letter regarding children’s exposure to lead through drinking water in Texas. We appreciate the opportunity to address your questions as they relate to schools and day care facilities.

Schools and day care facilities in Texas are classified as non-transient, non-community water systems if they own and operate their own systems. They are classified in this manner if they have 15 connections or more, or serve 25 or more people at least six months out of the year. Other schools or day care facilities are served by community water systems.

Currently, there are 14 day care facilities and 166 schools in Texas that are monitored for lead on a regular schedule. Of these, 11 schools exceeded the lead action levels (greater than 0.015 mg/l) during the period from 1993 to 1999. All of these systems have since come back into compliance. There are currently no schools or day care facilities with lead exceedances. The TCEQ has five community water systems, out of 6,700 public water systems in Texas, that currently exceed the lead or copper action levels. These community water systems are required to follow through with the lead/copper program requirements.

Starting in 2002, TCEQ’s drinking water program has sent EPA’s booklets entitled “Lead in School’s Drinking Water” and “Technical Factsheet on Lead” to the administrators of schools or day care facilities that are public water systems before school starts each fall. This program will continue as part of TCEQ’s public relations outreach. Schools that are within a city, water utility, or district fall under their supplier’s lead/copper programs.

In addition to the TCEQ program, the Texas Department of Health (TDH) has an Environmental Lead Program that conducts an environmental investigation of children’s homes or environment through a contractor if the child’s pediatrician refers the case to them. Ms. Teresa Willis, the contact person for the Texas Department of Health/Environmental Lead Program, can be reached at (512) 458-7111, extension 6318.
With respect to collaboration opportunities with EPA, we receive excellent support for all of our drinking water programs from EPA Region 6 personnel. We have discussed with them the potential for revisiting the Lead Copper Rule in terms of corrosion control. We look forward to collaborating further as the opportunity arises.

We hope that this information is helpful to you. If you have further questions or need additional information, please contact Mr. Buck Henderson, Manager of our Public Drinking Water Section, at (512) 239-0990.

Sincerely,

[Signature]

Kathleen Hartnett White, Chairman
Texas Commission on Environmental Quality

cc: Ms. Teresa Willis, Texas Department of Health
Benjamin Grumbles  
Acting Assistant Administrator  
U.S. EPA, Office of Water  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Mr. Grumbles,


I share your concern regarding protecting our children from lead and other disease causing agents. This letter is intended to give you a brief historical perspective of what has been done, and what we are continuing to do in Utah to protect the quality of drinking water.

In response to the Lead Contamination Control Act of 1988, we had previously provided each of the then 42 school districts and childcare facilities with all available information to aid in the lead-lined drinking water tank recall. We recommended remedial action be taken when lead levels exceeded 20 ppb at an outlet. A list of certified laboratories and instructions for sampling were also provided. Once our training took place, we left the compliance with the Act in the hands of school officials. Very few school districts informed us of the results of their actions, but we expect that they followed up with the recall requirements. In light of the current priority EPA has place on lead, we are seeking out potential higher risk schools to conduct follow-up training and testing to determine if there is a problem or confirm compliance.

Today, I am happy to report that no drinking water source in Utah exceeds the action level for lead. During the history of the Lead and Copper Rule, less than 10 public water systems in Utah exceeded the 90th percentile action level for lead or copper. Those public water systems that did exceed the action level have treatment in place to correct the problem.
Benjamin Grumbles
April 30, 2004
Page 2

The results of recent studies on blood-lead levels of children in Utah document a very low occurrence of lead. While the national studies show the prevalence of lead poisoning in children to be 4.4 percent, Utah's average is 1.2 percent. Health officials in Utah do not cite drinking water consumption as the pathway for lead poisoning. Lead-based paint seems to be the major contributor. Action has also been taken in cases where lead in soils at Superfund sites is suspected of contributing to blood-lead levels in children.

Other activities the Utah Division of Drinking Water has in place, to ensure that what happened in Washington, DC won't happen in Utah, include:

a) Prior plan approval for any treatment proposed.
b) Prior pilot testing of chemicals and approval of chemical use.
c) Utah Water Quality Alliance. Similar to the now promoted Area Wide Optimization Plan (AWOP), the Alliance has been in place for a decade. Water system operators share technical information on treatment processes.
d) Operator certification training. We work with many private organizations and provide training throughout the state on a regular basis to ensure water system operators are in tune with the rules.
e) Consumer confidence reports. For several years, water systems have been providing their customers with reports on their compliance with the Safe Drinking Water Act. This will continue and the public is being notified of the activities concerning their water supply.
f) Compliance and enforcement activities. We work with individual water systems that are not in compliance (monitoring or MCL violations). Rural Water Association of Utah also sends circuit riders to water systems to help them come into compliance. If all else fails, we take enforcement actions to force water systems to come into compliance.

Compliance with all drinking water rules is of utmost importance. I believe Utah has the necessary procedures in place to protect children from lead contamination in drinking water. Thank you for your concern regarding this important public health matter.

Best regards,

Dianne R. Nielson, Ph.D.
Executive Director
April 14, 2004

Mr. Benjamin H. Grumbles
Acting Assistant Administrator
U.S. Environmental Protection Agency
Washington, DC 20460

Dear Mr. Grumbles:

I am writing in response to your letter dated March 18, 2004 that was addressed to Dr. Scott Williams, Executive Director, Utah Department of Health. Your letter asked if our agency was implementing a program to control lead in drinking water for schools and day care facilities.

The Utah Department of Health has no program to control lead levels in schools or day care facilities. Our Department of Environmental Quality has responsibility for drinking water in Utah and the requirements for the ongoing monitoring of drinking water supplies.

If monitoring of drinking water in Utah revealed elevated lead levels, the Department of Health would be able to assess the impact of the elevated lead levels on children who drink the water.

If you have any additional questions, please contact me at 801 584 8450.

Sincerely,

[Signature]

Charles Brokopp, DrPH
Director

cc. Kevin Brown Division of Drinking Water, DEQ
May 18, 2004

Benjamin H. Grumbles
Acting Assistant Administrator for Water
United States Environmental Protection Agency
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for the EPA’s March 18, 2004, letter regarding steps Vermont has taken to address lead in drinking water in its schools. As described below, over the past two decades, the state has implemented several programs aimed at monitoring lead levels in schools’ drinking water. Currently, the Department of Environmental Conservation’s (DEC) Water Supply Division is planning another effort to ensure that all schools’ and childcare facilities’ public water systems test at the tap for lead.

In 1991, the primacy program for drinking water was transferred from the Vermont Department of Health (VDH) to the (DEC). I understand that you have made a similar request for information to Health Commissioner Dr. Paul Jarris. The VDH may be able to supply you with some details from its records. Given that the people who worked in the drinking water program at the VDH transferred to the DEC with the program, however, I believe we can provide you with a reasonably accurate picture.

In 1992, the Water Supply Division adopted the EPA’s Lead and Copper Rule and water systems in Vermont began testing, as required. The division continues to work with systems needing to optimize treatment for lead and copper. Since that time, schools that have their own sources have been conducting periodic monitoring for lead and copper. Nonetheless, because of the structure of the federal lead and copper regulation, we do not believe that schools are routinely tested when they are customers of public community systems.

In 1988, the VDH offered a free, voluntary lead-in-drinking-water testing program to all schools, public and private, in Vermont. Of the 600 schools contacted, about 45 percent participated in the testing program. A year later, the VDH again offered to test, at no charge, schools’ refrigerated water coolers and drinking water for lead. As EPA requested at that time, in the fall of 1989, the VDH sent a letter to all schools requesting information about their refrigerated coolers. The VDH provided an inventory of the refrigerated coolers in Vermont’s schools to EPA in late 1989.

Following this initiative, in 1989, the VDH and Department of Social and Rehabilitation Services conducted a statewide study of lead in drinking water at licensed childcare and preschool facilities.
As a follow-up to initial efforts to comply with the Lead Contamination Control Act, in the spring of 1994, the DEC, in consultation with the VDH, launched a voluntary lead-in-drinking-water testing program for schools and childcare facilities. About 2,600 schools and childcare facilities were sent informational packages recommending lead testing in their facilities. The package included information about how to test all makes and models of water coolers; sampling protocols and available certified laboratories; model numbers of coolers that may or may not have lead-lined tanks or contain lead solder; response forms to identify the water cooler inventory; and other information.

Of the 2,600 facilities, 250 were schools designated as public water systems that had been previously directed to monitor for lead under the Lead and Copper Rule. The remaining 2,300 facilities either were customers connected to public community water systems or had their own sources (wells) but were too small to be regulated as public water systems. About 4 percent of the facilities notified completed the response form. For those systems whose mail was returned as undeliverable, we attempted to locate proper mailing addresses to resend the materials.

The DEC is committed to ensuring that Vermont’s children are not exposed to lead from drinking water from a public water system. As a result of the low participation rate for the 1994 testing program, we intend shortly to focus another effort at lead in school drinking water. Given the voluntary nature of the program, the competing interests for schools’ time and money and the importance of this issue, it might be helpful for the EPA to consider a different approach to ensuring lead levels in schools are as low as possible. For example, it might be appropriate for states and the EPA to directly conduct sampling at schools rather than to rely on voluntary reporting. I encourage you to work closely with states in this important effort and invite you to contact Water Supply Division Director Jay Rutherford if you are interested in discussing this idea in greater depth. He may be reached at (802) 241-3434 or by e-mail to jay.rutherford@anr.state.vt.us.

Please also feel free to contact me at (802) 241-3808 if you would like to discuss this issue further or if you need additional information about Vermont’s efforts.

Sincerely,

Jeffrey Wennberg
Commissioner

cc: Health Commissioner Dr. Paul Jarris
Jay Rutherford, Director of Water Supply
April 15, 2004

Benjamin Grumbles, Acting Assistant Administrator
U.S. Environmental Protection Agency
Office of Ground Water and Drinking Water
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Mr. Grumbles:

Thank you for your inquiry regarding the Vermont Department of Health’s role in protecting children from exposure to lead in drinking water at schools and day care facilities. Historically, Vermont has taken a proactive approach to reduce exposure to all sources of environmental lead including paint, soil, dust, and drinking water. As part of its program services, the Childhood Lead Poisoning Prevention Program provides environmental sampling for families of children with elevated blood lead levels of equal to or greater than 20 micrograms per deciliter. This may include sampling drinking water at homes, day care facilities, and other residences that a child frequents.

In 2000, the Vermont Legislatures passed Act 125, the School Environmental Health Act. The goal of the legislation is to provide schools with the resources necessary to develop and adopt environmental management plans. Considerations of the plan may include drinking water issues. In addition, the Vermont Department of Health offers training to schools and technical assistance when questions arise in the process. The Health Department has a staff drinking water engineer who is available to make technical recommendations to schools and act as a liaison. In Vermont, it is the Department of Environmental Conservation’s Water Supply Division which regulates public drinking water systems. Schools being nontransient noncommunity systems are monitored and provided educational materials as required by the 1991 Lead and Copper Rule.

The Health Department holds a seat on the State Plumbers’ Board. Through this Board, the state Plumbing Code has banned 50/50 lead solder since 1989 and more recently as a result of the Safe Drinking Water Act Amendments of 1996, newly installed faucets and fittings must now meet NSF approval for lead safety.
Licensed childcare facilities in Vermont do practice what is known as Essential Maintenance Practices for buildings built before 1978 to minimize children’s’ exposure to lead dust/paint. Drinking water is analyzed for lead similar to regulated systems, with flushing protocols and parental notification outlined in the Social Rehabilitation Service’s Early Childhood Program Licensing Regulations (February 12, 2001).

The Vermont Department of Health secured grant funding for fiscal year 2003 - 2004 from EPA’s Healthy Communities Program. Subsequently, the Department of Health has established a grant program. To date 8 schools are participating in finalizing environmental management plans that include reducing exposure to lead and environmental asthma triggers. Should you have specific questions regarding goals, activities, and outcomes of these programs feel free to contact Sheri Lynn, Environmental Health Program Manager, at 802-865-7762.

I trust this has been useful. As Commissioner I am proud of the quality of staff and programs that coordinate with schools, daycares, and many other partners in working to keep children safe from lead and other harmful environmental exposures.

Sincerely,

Paul E. Jarris, MD, MBA
Commissioner of Health
Mr. Benjamin H. Grumbles  
Acting Assistant Administrator  
Office of Water  
United State Environmental Protection Agency  
1200 Pennsylvania Avenue, Northwest  
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for your March 18, 2004 letter concerning your desire to learn more about state and local efforts to monitor and protect children from exposure to lead in drinking water at schools and day care facilities. Please be assured that the Virginia Department of Health (VDH) shares a desire to protect our school children.

As you pointed out, the Lead Contamination Control Act of 1988 (LCCA) addressed lead in the drinking water at schools and day care facilities. In summary, the LCCA’s purpose was to minimize exposure of children to lead. The major provisions:

1) Required EPA to develop a guidance manual.
2) Required the states to distribute the manual to local education agencies.
3) Recommended schools test for lead and respond to lead problems.
4) Mandated that the Consumer Product Safety Commission (CPSC) order the repair, replacement or recall of water coolers with lead-lined tanks.
5) Banned manufacture of such coolers.
6) Directed state to assist schools in evaluating and reducing lead in systems.
7) Required school officials to notify consumers of testing results regardless of lead content.

Following the LCCA, the Department of Health and the Department of Education took the following actions:

1) The VDH Office of Drinking Water’s Field Offices provided technical assistance to school and day care facilities.
2) The VDH Office of Drinking Water distributed the Environmental Protection Agency (EPA) guidance manual and related information to day care facilities by letter dated September 1989 from Allen R. Hammer, Director.

3) The Department of Education distributed the EPA guidance manual and related information as directed by memo of April 26, 1989 from John Davis, Superintendent of Public Instruction to Division Superintendents.

Also, as you pointed out, the Lead and Copper Rule (LCR) authorized by the 1986 Amendments to the Safe Drinking Water Act regulates lead in drinking water. Virginia has fully implemented the LCR for all of the community and non-transient non-community systems (includes schools and day care facilities) in Virginia. We continue to monitor the systems to ensure that they complete the required lead and copper sampling requirements, review the monitoring results and take appropriate action as necessary.

Virginia does not have an ongoing special program beyond the scope of the LCCA and the LCR for schools and day care facilities. However, in discussions with the Department of Education and the Department of Social Services, we will distribute updated information to the appropriate school and day care officials. We would look to EPA to provide the updated materials as done during the LCCA implementation. We will also be obtaining additional drinking water lead data by collecting and analyzing water samples from selected day care facilities and elementary schools statewide.

For your information, recently many school systems in Northern Virginia, in cooperation with water utilities and local health departments, have voluntarily conducted special lead sampling to assess the health risks. Seven hundred fifty samples have been collected from 160 schools and related facilities in Arlington, Fairfax, Loudoun, Spotsylvania, and Stafford Counties and in the Cities of Falls Church, Fredericksburg, and Manassas. With over 95% of the results reported, only 11 schools had a tap that tested above the 15 ppb action level in the first draw (6-hour standing) sample. In those 11 schools only one tap continued to test above the action level following a 30-second flush. The school systems are replacing water fixtures, faucets, fountains, and meters that are suspected of potentially causing elevated lead levels.

I hope this response meets your needs and expresses our willingness to work together to continue to protect children from exposure to lead in drinking water at schools and day care facilities.

Sincerely,

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner
April 27, 2004

MEMORANDUM

To: District Directors
    Environmental Health Managers

From: Gary L. Hagy, Director
       Division of Food and Environmental Services

       Jerry Peaks, Director
       Office of Drinking Water

Subject: Lead in Drinking Water

The recent detection of elevated lead levels in drinking water in Washington, DC, has generated extensive public interest. The Department wishes to be pro-active in this area rather than reactive. Therefore, we will soon be asking you to assist us in a survey of water systems across the state.

Since elevated lead levels is more of a concern in young children, we will be sampling approximately 270 water systems (both public and private) across the state that serve child care facilities and elementary schools. The number of facilities will be limited to a maximum of two or three per locality with the exception of the cities of Richmond and Norfolk, which may be asked to take more samples. Also, some Northern Virginia localities may not be sampled as they may have already been sampled this year.

Once the sampling points are identified sample kits will be mailed to the EHS listed in VENIS as being assigned to the specific facility to be sampled. If no EHS is specified, then the kit will be sent to the environmental health manager. Once the sample kits are received, the samples need to be collected and submitted within a week of receipt.

The samples that will be taken must be “first draw” samples, i.e., must be taken the first thing in the morning after the water has set overnight and before the water is used in the morning, followed by a “first flush” sample taken after a 60 second flush. This will require the EHS to schedule early morning visits with the facility owners or operators to collect the samples. Additional guidance and details will be sent out in the next few days.

If you have any questions, please contact Gary Hagy or Jerry Peaks.

---

Gary Hagy <Gary.Hagy@vdh.virginia.gov>
Director
Division of Food and Environmental Services
Virginia Department of Health
May 4, 2004

Benjamin H. Grumbles, Acting Assistant Administrator
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for your recent letter requesting information about Washington State’s efforts to monitor and protect children from exposure to lead in drinking water at schools and in day care facilities. We agree that children are among the most vulnerable to health effects from contaminants in drinking water and are committed to fostering a safe and healthy school environment.

Programs for Drinking Water and Healthy Schools
The Washington Department of Health’s Division of Environmental Health has programs in place that speak to various aspects of maintaining safe drinking water and healthy schools.

- Office of Drinking Water’s mission is to protect the health of the people of Washington State by assuring safe and reliable drinking water. The office focuses its efforts on public water systems subject to the federal Safe Drinking Water Act (SDWA) and the state’s regulatory program for smaller public water systems. The office collaborates with others to accomplish its mission, and provides technical assistance and training to water systems to help them meet requirements.

- Office of Environmental Health and Safety through its School Health and Safety Program, provides consultation, technical assistance, and training to local health jurisdictions, schools, and parent groups to reduce the number and severity of illness and injuries occurring at schools. A central part of their training and outreach program is the Health and Safety Guide for K-12 Schools in Washington, developed in conjunction with the Washington State Office of Superintendent of Public Instruction. One component of this comprehensive guide directs schools to comply with drinking water requirements.
Benjamin H. Grumbles
May 4, 2004
Page 2

There may be a gap between the water quality monitoring requirements for a public water system under the SDWA Lead and Copper Rule, and the actual water quality within a school facility connected to a public water system. When a water system’s lab results are satisfactory, it does not guarantee that the water quality in every facility it serves is also satisfactory. This raises a concern that some individual schools may have unsafe drinking water. We are concerned about overall water quality in schools. Our primary focus is on reducing exposure to lead in drinking water because of its potential for acute health impacts on children.

The department is creating tools for school boards, administrators, and facility managers to use to evaluate risk in their school facilities. Two examples are enclosed. Works in progress include a water quality self-assessment tool and instructional materials on how to monitor water quality, evaluate test results, and take corrective actions when necessary. We are also planning “Healthy Schools” seminars with a drinking water session this fall for school and local health officials.

The good news is that we have a low rate of water systems in Washington that are exceeding the lead action level (57 of 2,600 water systems subject to the Lead and Copper Rule). These systems are actively working with the state on corrosion control programs to reduce lead exposure to their customers. The uncertainty is that only 3 percent of the 2,500 public and private schools (K-12) in the state are regulated as a public water system, which is one reason the Health and Safety Guide is so important. Of the nearly 100 schools that are public water systems, only 4 are currently exceeding the lead action level. These schools are working with the state to implement permanent solutions to their water quality problem.

Day Care Facilities and Drinking Water Quality
Your letter asked about water quality in day care facilities as well as schools. The issue is more problematic than the question of school water quality. All licensed day care facilities in Washington are required to meet safe drinking water requirements; however, the requirements vary depending on the size and location of the facility and its water supply. Day care facilities range from a single home on an individual well to a large facility located in an office building on a large municipal water system. The Washington Department of Social and Health Services (DSHS) licenses day care facilities. We are currently working with DSHS and local health agencies to train agency staff and potential licensees on safe drinking water requirements.

What can EPA do to assist states in achieving safe and reliable drinking water in schools?
The Office of Drinking Water and those water systems that are actively investigating water quality risks at schools are struggling to find meaningful and up-to-date technical assistance materials. We suggest EPA consider updating and expanding its technical assistance including:

- Updating existing publications and references.
• Providing specific funding so that primacy agencies can contract with third party technical assistance providers {i.e., Rural Water, Rural Community Assistance Corporation (RCAC)} to design and deliver water quality programs directly to schools.

• Providing Drinking Water Academy training for school administrators, boards, and facility managers on assessing drinking water, and how to effectively talk about water quality in schools with parents and the community.

• Hosting safe drinking water workshops for agencies that have direct responsibility for regulating schools and day cares. (This is often not a traditional drinking water program.)

• Providing expanded funding mechanisms (DWSRF) as an incentive for water systems to work with their school district customers on problem assessment, risk communications, and water quality solutions, especially for those gap situations when water systems are meeting their water quality requirements, but community schools may be failing due to inadequate plumbing facilities.

• Providing schools with guidance for addressing non-acute water quality issues such as taste, odor, sediment, and color. While not direct health threats, these can be significant problems for the community and a perceived health threat.

Thank you for the opportunity to share our perspective and information about our programs on this important issue. If you have any questions or would like more information, please contact Janice Adair, Assistant Secretary, Division of Environmental Health, at (360) 236-3050; Denise Clifford, Director, Office of Drinking Water, at (360) 236-3110, or Maryanne Guichard, Director, Office of Environmental Health and Safety, at (360) 236-3391.

Sincerely,

Mary C. Selecky
Secretary

Enclosures

cc:   L. Jon Iani, Environmental Protection Agency, Region 10
      Linda Hoffman, Department of Ecology
      Janice Adair, Department of Health
      Denise Clifford, Department of Health
      Maryanne Guichard, Department of Health
Safe Drinking Water in Washington Schools

Why lead is an issue in schools
Drinking water is not usually a significant source of lead for children, but it could contribute to total exposure. Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Excess amount of lead in the body can damage the brain, kidneys, nervous system and red blood cells. In children, lead has been associated with impaired mental and physical development, as well as hearing problems. The harmful effects of lead in the body can be subtle and may occur without any obvious signs of lead poisoning.

Reducing the amount of lead in drinking water is an important part of reducing a child’s overall exposure to lead in the environment. Typical sources of lead exposure include: dust and chips from interior and exterior lead-based paint removal; lead-contaminated soil; industrial sources of lead; and lead-containing materials used in parental occupations or hobbies.

The “on-again”, “off-again” water use patterns of most schools can result in elevated lead levels in drinking water. Water that remains stagnant in plumbing overnight, over a weekend, or during a vacation is in longer contact with lead-containing pipes, solders and fixtures and may therefore contain higher levels of lead.

How does lead get into drinking water?
Lead generally enters drinking water from a building’s plumbing system. Lead may be present in various parts of the plumbing system (such as lead solder, brass fixtures, and lead or galvanized pipes) and is picked up by the water passing through the plumbing system. The amount of lead, if any, in a plumbing system will depend on the materials from which the system was constructed and the corrosivity of the water. Even new plumbing fixtures can leach lead into the drinking water.

The amount of contact time between water and any lead source is the greatest contributing factor to lead in drinking water. The longer water remains standing in the plumbing system, the more lead it can absorb from any lead sources present. For this reason, the lead concentration is at its highest when water has remained unused overnight or over a weekend. Additionally, factors such as water chemistry and temperature can affect the rate at which water absorbs lead.
Are there other contaminants that can get into school drinking water?
Copper, cadmium, and other primary contaminants can leach from plumbing systems into the drinking water and may cause health concerns when levels exceed standards.

Zinc and iron may also leach from the plumbing system, however, these elements have secondary standards (non-health related), when exceeded, causes aesthetic problems in the water (e.g. taste, odor, clarity, and staining).

How Does the Safe Drinking Water Act Address Lead in Schools?
Public and private schools that own/operate their own water system are considered a non-transient, non-community public water system and are subject to the requirements of the federal Safe Drinking Water Act (SDWA). In Washington the Group A Public Water Systems Regulation, chapter 246-290 WAC requires all non-transient non-community water systems to sample for lead according to the provisions of the SDWA to minimize the risk of exposure to high levels of lead.

What gaps exist?
Schools that receive their drinking water supply from a municipal or privately owned water supply are considered a customer of that water system and are not required to conduct water quality testing.

Water systems that provide drinking water to schools test for lead and other contaminants in select locations throughout their distribution system. Schools on their system may or may not be part of the sampling sites. Because water quality problems at schools are often caused by plumbing conditions rather than the quality of the water being delivered, problems could go unnoticed.

Department of Health Activities to Assure Safe Drinking Water in Schools
The Department of Health in coordination with the Office of the Superintendent of Public Instruction is increasing its out reach to schools and school districts to help assess problems and develop solutions to better protect children. The Department’s Office of Drinking Water will develop a water quality self-assessment tool and educational materials to help schools monitor water quality, evaluate results, and take corrective actions when necessary.

Contact Information
Gregg Grunenfelder, Chief Administrator, Division of Environmental Health, 360-236-3053
Gregg.gruenfelder@doh.wa.gov

Rich Hoey, Acting Director, Office of Drinking Water, 360-236-3110
Rich.hoey@doh.wa.gov

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Fact Sheet

Lead in School Drinking Water

Why lead is a health concern for children?
Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Drinking water is not usually a significant source of lead for children, but it could contribute to total exposure. Excess amounts of lead in the body can damage the brain, kidneys, nervous system and red blood cells. In children, lead has been associated with impaired mental and physical development, as well as hearing problems. The harmful effects of lead in the body can be subtle and may occur without any obvious signs of lead poisoning.

Why is lead a concern for schools?
Reducing the amount of lead in drinking water as close to zero as possible is an important part of reducing a child’s overall exposure to lead in the environment. Typical sources of lead exposure include dust and chips from interior and exterior lead-based paint removal, lead-contaminated soil, industrial sources of lead, and lead-containing materials used in parental occupations or hobbies.

The “on-again, off-again” water use patterns of most schools can result in elevated lead levels in drinking water. Water that remains stagnant in plumbing – overnight, over a weekend, or during a vacation – is in longer contact with lead pipes or lead solders and could contain higher levels of lead.

How does lead get into drinking water?
Lead generally enters drinking water from a building’s plumbing system. Lead may be present in various parts of the plumbing system (such as lead solder, brass fixtures, and lead or galvanized pipes) and is picked up by the water sitting in the plumbing system. The amount of lead, if any, in a plumbing system will depend on the materials from which the system was constructed and the pH of the water. The age of the building does not seem to matter when addressing lead concerns and even new plumbing fixtures can leach lead into the drinking water.

The amount of contact time between water and any lead source is the greatest contributing factor to lead in drinking water. The longer water remains standing in the plumbing system, the more lead it can absorb from any lead sources present. For this reason, the lead concentration is at its highest when water has remained unused overnight or over a weekend. Additionally, factors such as water chemistry and temperature can affect the rate at which water absorbs lead.
Are there other contaminants that can be in school drinking water?
Copper, cadmium, and other primary contaminants can leach from plumbing systems into the drinking water and may cause health concerns when levels exceed standards. Zinc and iron may also leach from the plumbing system, however, these elements have secondary non-health related standards. When exceeded, they cause aesthetic problems in the water (e.g., taste, odor, clarity, and staining).

How does the Safe Drinking Water Act address lead in schools?
Public and private schools that own/operate their own water system are considered a non-transient, non-community public water system and are subject to the requirements of the federal Safe Drinking Water Act (SDWA). In Washington the Group A Public Water Systems Regulation, Chapter 246-290 WAC requires all non-transient non-community water systems to sample for lead according to the provisions of the SDWA to minimize the risk of exposure to high levels of lead.

How to test for lead in drinking water?
The SDWA Lead and Copper Rule applies only to schools that provide their own water supply. The Office of Drinking Water has a brochure titled Lead and Copper Sampling Procedure that provides a step-by-step description of how to collect a sample for analysis for these types of systems. A similar brochure is being developed for instructions on how to collect water samples within a school building. In general, to test for lead in schools, a 250 ml sample should be collected from the cold-water tap first thing in the morning at sites that are regularly used for drinking or cooking purposes. Samples should then be sent to a state accredited laboratory.

What can be done to reduce lead levels?
Boiling the water will not remove the lead. The following things can be done to reduce lead levels: have staff and students run the water for a few seconds before drinking; remove or replace fixtures that are leaching lead; flush the piping system in the building; provide bottled water; make repairs to the plumbing system; use only the cold water tap for drinking, preparing juice, or cooking; install water treatment, or develop a new water source.

Where can I get more information?
For schools connected to public water systems, contact your water utility, or Washington State Department of Health, Office of Drinking Water at 1-800-521-0323 or visit us online at: http://www.doh.wa.gov/ehp/dw/default.htm

Additional information is available from the Environmental Protection Agency at http://www.epa.gov/safewater/lead/testing.htm#how. For information about the Department of Ecology’s Lab Accreditation Program you can visit their Web site at: http://www.ecy.wa.gov/programs/eap/labs/labs_main.html

If you have questions, you can contact Derrick Dennis, Lead and Copper Program Manager, Office of Drinking Water, at 360-236-3122 or derrick.dennis@doh.wa.gov

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June 7, 2004

Mr. Benjamin H. Grumbles  
Acting Assistant Administrator  
United States Environmental Protection Agency  
Washington, D.C. 20460

Dear Mr. Grumbles:

The West Virginia Department of Environmental Protection is in receipt of your letter concerning state and local efforts to monitor and protect children from exposure to lead in drinking water at schools and day care facilities. This letter is to inform you that the Drinking Water Program in the State of West Virginia is under the jurisdiction of the State Health Department. Therefore, we have forwarded your letter to Barbara S. Taylor, Director for the Office of Environmental Health Services, Bureau for Public Health.

If our agency can be of any further assistance please feel free to contact us.

Sincerely;

Stephanie R. Timmermeyer  
Cabinet Secretary

cc. Allyn G. Turner, Director, DWWM, WVDEP
Mr. Benjamin H. Grumbles
Acting Assistant Administrator
United States Environmental Protection Agency
Office of Water (WP4601M)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Mr. Grumbles:

Thank you for your recent letter regarding your interest in our efforts for monitoring lead in drinking water at schools and day care facilities.

Primacy for the federal Safe Drinking Water Act has been vested with the Bureau for Public Health (BPH). The BPH has adopted the federal National Primary Drinking Water Regulations by reference, specifically as they relate to lead, copper, and corrosion control. We are happy to report that all community public water systems serving schools, day care facilities, and head start programs are in compliance with the Lead and Copper Rule (LCR) requirements.

When the State adopted the federal requirements, specifically § 141.43, a concentrated effort to assure that water coolers in schools throughout the State were acceptable models was undertaken. Each county board of education was required to survey all schools and inventory water coolers. Those units known to have been manufactured with 50/50 tin-lead solders or lead-lined reservoir tanks were required to be removed and replaced with approved fountains.

Unfortunately, the BPH does not have the resources to conduct a sampling program targeted specifically to schools other than those that have their own water system. Currently, there are 68 non-transient, non-community public water systems serving school facilities in West Virginia. With the exception of one school system that had a high copper level in the last monitoring period, all other systems are currently in compliance with the LCR requirements. The facility that recorded the high copper level is currently modifying their treatment with the addition of a caustic to raise the pH.

The BPH recognizes the significance of high lead levels in drinking water and will continue to coordinate with the United States Environmental Protection Agency (EPA) to monitor, educate, and eliminate sources of lead contamination. In this regard, we would
be interested in providing a higher level of surveillance to include all schools. Unfortunately, at a time when both state funds and EPA state drinking water grants are shrinking, the resources to implement additional drinking water programs are not currently available. If the necessary resources can be provided, we would be committed to developing a collaborative program with EPA.

Please be assured that the BPH will continue to provide assistance to the extent resources permit to minimize the health risks associated with lead contamination. If you have any questions or need additional information, please do not hesitate to write or call Victor R. Wilford, P.E., Director, Environmental Engineering Division, 815 Quarrier Street, Charleston, West Virginia 25301, telephone (304) 558-6745, or via e-mail at vwilford@wvdhhr.org.

Sincerely,

Chris Curtis, M.P.H.
Acting Commissioner

CC: nsf

cc: Richard Rogers, EPA, Region III
Barbara S. Taylor
Victor R. Wilford
April 2, 2004

Benjamin H. Grumbles, Acting Assistant Administrator
Office of Ground Water and Drinking Water
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Mr. Grumbles:

Thank you for contacting me regarding the safety of drinking water provided to schools and day cares. In Wisconsin, the Department of Natural Resources' (WDNR) Bureau of Groundwater and Drinking Water is responsible for ensuring the safety of public water supplies. The WDNR has worked with several cities in Wisconsin to ensure safe lead levels in older homes. I understand that a copy of your letter has been received by the WDNR. Their municipal water supply program will reply in a separate letter explaining how the lead rule was applied to schools and daycares.

Thanks again for contacting our Department regarding this important issue.

Sincerely,

Helene Nelson
Secretary
April 22, 2004

Mr. Benjamin H. Grumbles, Assistant Administrator
Office of Water
U. S. Environmental Protection Agency
Washington, DC 20460

Subject: Lead Control in School Drinking Water Supplies

Dear Mr. Grumbles:

Thank you for your letter of March 18, 2004 regarding State actions to reduce lead in drinking water at schools and daycare facilities. As you state in your letter, under the EPA’s Lead and Copper Rule (LCR), only schools with their own water supply are required to monitor, and only systems that exceed action levels for lead and copper would implement lead and copper control strategies. In Wisconsin, those nontransient noncommunity school or daycare water systems that exceed a lead or copper action level are indeed taking action to reduce lead and copper levels.

There are no other monitoring programs specifically aimed at schools or daycare facilities served as a part of a larger community water system. In fact, as I am certain you are aware, the monitoring requirements in the LCR would generally direct municipal community systems to monitor at locations other than schools and daycare facilities.

The Department of Natural Resources in concert with the Wisconsin Department of Health and Family Services, did require extensive lead monitoring at schools and daycare facilities under the Lead Contamination Control Act (LCCA) in the late 1980’s and early 1990’s. Monitoring uncovered numerous locations around the State where lead was a problem in schools and daycare facilities and the Department followed up by requiring removal and/or replacement of many drinking water coolers and other potable water fixtures. However, with promulgation of the LCR, implementation of the LCCA came to a close as we bent our efforts toward implementation of the much more complicated and comprehensive Lead and Copper Rule.

In summary, Wisconsin does not have a special or separate program to control lead in drinking water at schools and day care facilities. There is a State program that seeks to reduce exposure to lead paint in schools but activities associated with that program are also generally complete.

If US EPA decides to mandate additional efforts to control lead in schools and day care facilities either by amending the LCR or by creating a new regulation, additional resources will be needed to implement that mandate. EPA must understand that in addition to financial resources, States must be forced to use the resources to hire appropriate staff to implement the program. Currently, primacy agents in some States are prevented from hiring staff to implement program requirements even if financial resources are available to do so.
I hope this information is helpful. Should you have additional questions, please contact my Drinking Water and Groundwater Bureau Director, Jill Jonas at (608) 267-7545, or her Drinking Water Quality Section Chief, Don Swailes at (608) 266-7093.

Sincerely,

[Signature]

Todd L. Ambs, Administrator
Division of Water

cc: J. Jonas, DG/2
    D. Swailes, DG/2
April 14, 2004

Ref: BDS-2004-150

Benjamin H. Grumbles, Acting Assistant Administrator
U.S. Environmental Protection Agency
Office of Water (4101M)
1200 Pennsylvania Avenue NW
Washington, D.C. 50460

Dear Mr. Grumbles:

This is in response to your request for information on state and local efforts in Wyoming to monitor lead exposure from drinking water in schools and day care facilities. Wyoming has not adopted primacy regarding the Safe Drinking Water Act (SDWA), therefore, EPA Region 8 has SDWA jurisdiction over public water systems in Wyoming.

The Wyoming Department of Health currently collects results from blood lead tests performed on all children but there is no Wyoming state program that addresses lead exposure in children. Wyoming has a reporting law which requires the blood lead test results to be reported to the Department of Health, regardless of level.

Federal funding was previously our state's only source of funding for our childhood lead program. In the last grant cycle, the Centers for Disease Control and Prevention (CDC) discontinued its funding for the Wyoming Childhood Lead Poisoning Prevention Program (CLPPP). At this time, there are no state health department programs in Wyoming monitoring lead levels in drinking water specifically in our schools and day care facilities. We would be interested in participating in a voluntary program to monitor drinking water for lead, but resources are currently not available to support those activities.

If you need additional information, please do not hesitate to contact Debi Nelson, Lead and Radon Program Manager, at (307) 777-6015.

Sincerely,

Brent D. Sherard, M.D., M.P.H., Deputy Director of Public Health and State Health Officer
Wyoming Department of Health

BDS/DN/vh

cc: David Barber, D.V.M., M.S., Environmental Epidemiologist
    Karl Musgrave, D.V.M., M.P.H., State Epidemiologist
    Debi Nelson, Lead and Radon Program Manager

117 Hathaway Building • Cheyenne WY 82002
E-Mail: wdh@state.wy.us • WEB Page: http://wdh.state.wy.us/WDH
FAX (307) 777-7439 • TTY (307) 777-5648 • (307) 777-7656
DATE: APR 23 2004

SUBJECT: Letters to State Environmental and Health Commissioners on Lead in Drinking Water at Schools and Day Care Facilities

FROM: Jane M. Kenny, Regional Administrator
Region II

TO: Benjamin H. Grumbles
Acting Assistant Administrator
Office of Water

This is in follow-up to your letters dated March 18, 2004, to the Environmental and Health Commissioners of all States, seeking their help in learning more about state and local efforts to monitor and protect children from exposure to lead in drinking water at schools and day care facilities. We look forward to receiving any information that our States provide. As you may know, beginning in FY02, in association with our Children’s Health Initiative, Region 2 has extended considerable resources to work with school administrators in targeted areas within this Region to assure that they are protecting children from exposure to lead in drinking water based on the goals outlined in the 1989 and 1994 EPA Guidance. We have had the complete cooperation from our applicable State partners. Therefore, I wanted to take this opportunity to update you on Region 2’s efforts in this area, share our experience, and ask for assistance from your Office in the development of tools that will help EPA and the States address this important issue.

In 2002, using public health information concerning children’s blood lead levels, the Region initiated discussions with the New York City Board of Education (BOE) to determine their status of implementation of the 1989 Lead in Schools Drinking Water Guidance at their public schools. The initial communications from the BOE indicated that a program was in place and that the issue had been addressed as per the Guidance. As the Region looked further into the issue, it became apparent that this was not the case. Therefore, the Region decided to work with the BOE during the summer/fall of 2002 to perform sampling at all 1,200 public schools they operated (Region 2 staff sampled 27 schools). A total of 33,857 samples were taken at the 1,200 schools and at least one tap at 370 of these schools was immediately removed from service due to results that indicated lead concentrations exceeded the 20 ppb guidance level. As a result of this effort, we estimate that approximately 1 million school children in the City of New York are better protected from the risks associated with lead.

Based on our success with NYC, the Region decided to expand the effort to include additional targeted school districts in the Region in areas with high lead blood levels and to address additional children’s health issues in these targeted areas (i.e., asbestos, residential lead-
based paint and pesticides). To date, we have worked or are working with the Syracuse and Rochester, New York and Newark and Paterson, New Jersey. Our involvement with Syracuse was successfully completed and we are in the midst of cooperative sampling efforts with the other three cities. As a result, and in order to raise the attention of other school districts to the requirements of the Guidance, we will be awarding the Syracuse City School District with a Regional Environmental Quality Award in recognition of their cooperation and actions. In total, the expanded effort with the additional four school districts will result in over 250 schools being sampled (2,351 taps at 137 schools have already been sampled and 289 taps have been turned off), and over 99,000 children being better protected from lead risks associated with drinking water alone. We are currently evaluating additional school districts to work with in the immediate future and we have reached agreement with the New Jersey Department of Environmental Protection whereby they will conduct a similar program in five additional school districts (SDs). The State is currently finalizing an abbreviated guidance for SDs in New Jersey on lead in school drinking water. They are also preparing a survey form for the SDs to use to identify the actions taken under the Guidance.

Overall we have been successful with this program, and as you can see, we have measurable results from this effort. The overriding fact is that if you look for lead in the drinking water at these school facilities, you will generally find it despite the water supplier’s compliance with the lead and copper rule. A major factor in our success has been the willingness of the school districts to work with us when we bring the issue to their attention and explain the importance of the Guidance. Our involvement with each district starts with an introduction letter (sample attached) which explains the potential threats, asks what they have done in regards to the Guidance, and then offers EPA assistance in implementation of the guidance (we have been able to offer sampling assistance to each of the school districts at approximately twenty schools per district). We have been fortunate to get positive initial responses from these districts, and once we have sampling results which indicate there may be a problem, we have leverage to keep the district moving forward to quickly address the problem source through immediate removal from service of the problem fountain or tap.

It is our intent to continue our Children’s Health Initiative expanding to other targeted school districts, providing outreach through newly-available tools (ie, lead in school drinking water pamphlets, model LEA Asbestos Management Plan and Asbestos AHERA compliance checklists for schools) to assist the school districts that we are unable to work with directly, and by expanding the roles of the States in this program. The Office of Water’s attention to this children’s health issue reinforces our Regional efforts in this program with direct and measurable benefits to public health. Therefore, as your Office looks further into this issue, we would appreciate your consideration of the following needs that would assist the Region with the implementation of this effort based on our experience in this area:

- **Regulatory authority** - We know that there will be a great deal of discussion about the effectiveness of the current regulations concerning lead in drinking water, and we believe that if we are to truly make progress in the area of lead in school drinking water we will need the regulatory authority to make it happen. To that end I feel that the Agency is in a good position, as we already have a very comprehensive guidance document to serve as the model, and our occurrence data showing the extent of the issue is growing continually.
1991 EPA developed the *Lead in School Drinking Water* and amended it in 1994 with *Lead in Drinking Water in Schools and Non-Residential Buildings* (Guidance). The Guidance (copy enclosed), is intended to aid schools in determining whether a lead in drinking water problem exists. The Guidance provides step-by-step instructions for sampling water in schools for lead and correcting lead problems, if found. The guidance further explains health effects of lead, how lead gets into drinking water, how lead in drinking water is regulated, and how to communicate lead issues with users (i.e., employees, students, parents, etc.), if found.

Based on our experience, the implementation of this Guidance in school districts has been far from consistent. While some school districts have had a progressive program in place to test for and remedy any high levels of lead in drinking water, others have not stringently implemented the Guidance. One thing that has been consistent though, is that when many schools test as per the guidance they invariably find taps that have levels exceed the 20 parts per billion level for lead specified in the Guidance.

Based on EPA’s review of “Protecting Our Children from Lead: The Success of New York’s Efforts to Prevent Childhood Lead Poisoning” by the New York State Department of Health, the City of Syracuse falls within an area where a high rate of elevated blood lead levels in children is indicated. We acknowledge that there may be numerous potential factors contributing to these statistics, and that some of them can be controlled while others cannot. However, I am certain that you will agree that if the drinking water within the Syracuse schools is contributing to the elevated blood lead levels, this is a factor that should and can be addressed.

Therefore, it is EPA’s intention to review the level of implementation that the schools in Syracuse have achieved in regards to the Guidance, and to work with you to evaluate any existing programs or develop a program if necessary. In order for EPA to get a better understanding of the program Syracuse schools may currently have in place, please provide a summary on what has already been done or is being planned in Syracuse schools. This summary should include: how many schools have had their drinking water sampled for lead; what was the sampling protocol and how were sites selected; how many schools/sample locations have had levels that exceed the 20 ppb Guidance level; what actions have been taken to remedy elevated levels; and how have the results of the program been distributed to the interested parties.

If there is not a current program in place or if there has not been any effort to implement the Guidance to date, EPA would like to work with the Syracuse School District to develop a program. Our assistance will include development of sampling protocol based on the guidance along with a protocol to address elevated levels of lead in the drinking water, as well as communication of the findings to the appropriate parties. EPA would also be willing to offer a limited amount of sampling resources through our Regional Laboratory.
MARCH 17, 2003

Dr. Stephen C. Jones
District Superintendent
Syracuse City School District
725 Harrison Street
Syracuse, NY 13210

Dear Superintendent Jones:

The purpose of this letter is to open up a dialogue between the Environmental Protection Agency (EPA) and the Syracuse City School District regarding the drinking water supplied in Syracuse schools as a potential route of exposure to lead. As you are aware, exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Pregnant women and fetuses are also vulnerable to lead. Drinking water represents one possible means of lead exposure and some drinking water pipes, taps, and other outlets in homes and buildings may contain lead. The lead in such plumbing may leach into water and pose a health risk, and the longer the water is in contact with plumbing containing lead, the higher the potential that elevated lead levels will occur in the drinking water.

The EPA and the State of New York implement the provisions of the Safe Drinking Water Act (SDWA) to assure that public water systems meet state and federal standards for numerous contaminants, including lead. For lead, the regulation is intended to minimize the potential that elevated levels will be found in the water that is supplied to the community by the public water system. However, even though water delivered from a community's public water system may meet state and federal regulations for lead, a school may have elevated levels of lead in its drinking water due to contributions from plumbing within the building and the on again/off again water delivery patterns within the building. If the building's plumbing contains lead, water from drinking fountains have been found to contain higher levels of lead in the morning, when the water has been stagnant all night, allowing lead to leach from the plumbing into the water.

In 1998, Congress passed the Lead Contamination Control Act (LCCA), which amended the Safe Drinking Water Act (SDWA). Among other things, the LCCA is aimed at the identification and reduction of lead in drinking water at schools and day care facilities. The LCCA required EPA to develop a guidance document and testing protocol to assist schools in determining the source and degree of lead contamination in school drinking water supplies and in remedying such contamination. In addition, the LCCA requires that any Local Educational Agency that tests as per the EPA guidance make all results available and provide notification of its availability to parent, teacher and employee organizations.
Clear information on the risk associated with lead in schools’ drinking water - In our discussions with the school districts, we have acknowledged that the risk from lead in school drinking water may be small in comparison to other potential stressors but it is an area that we can address using the Guidance. This approach has worked to date as the districts have been willing to work with us. However, we anticipate, there is going to be someone who insists that the relative risk is minimal. We anticipate the need for help addressing that scenario and would appreciate any assistance that your Office can provide to give us this tool.

In addition, some guidance is also needed on how much of our focus should be on middle and high schools. If the greatest risk is associated with younger children, would it not be appropriate to focus limited State and federal resources on the elementary schools and day care? Currently we are approaching the school districts in a manner consistent with the guidance in that we want all schools sampled, but we do ask that elementary schools be tested first. Considering the number of drinking water taps in the middle and high schools, if we have clear guidance showing that the risk does not warrant the testing, we would certainly be able to focus on more of the elementary schools and day cares.

An additional factor that needs to be looked at in conjunction with the risk analysis is occurrence data. Region 2 has a growing data base, as does Region 3, but if this information was pulled together at the national level to show the number of schools sampled as well as the number of taps found (with elevated Pb levels), it will certainly make the need for this sampling/remediation effort more self-evident.

Funding for testing and remediation - We are dealing with institutions that are stretched to the limits to provide effective educational services while maintaining aging buildings and facilities. Offering financial assistance to help implement the Guidance would exponentially facilitate compliance. I would welcome your consideration of funding to help school districts with these efforts. Our experience is that lead samples cost between $15 - $20 per sample. Therefore, even a small amount of money could get a school district started on the program and once data is available to parents, teachers and administrators, showing taps exceeding the Guidance levels, it is very easy to keep the school district moving in the right direction.

I thank you for your attention to this important issue, and offer this Region’s assistance as you move forward in protecting children from exposure to lead in drinking water at schools and day care facilities. If you have any questions or would like to discuss this matter further, please call me.

Attachment

cc: Thomas V. Skinner, Acting Assistant Administrator, OECA
    Susan B Hazen, Principal Deputy Assistant Administrator, OPPTS
    Cynthia Dougherty, OGWDW
We would appreciate a response to this letter by April 18, 2003 and we are looking forward to hearing from you. A partnership in this initiative is in the best interest of children’s health protection and will produce the best results. If you have any questions or comments, please feel free to communicate with me. You can contact me at (212) 637-4000, or your staff can contact Douglas McKenna of my staff at (212) 637-4244.

Sincerely,

Original signed by
Patrick Durack

Richard L. Caspe, P.E., Director
Division of Enforcement and Compliance Assistance

Enclosure

cc: Denise Sheehan, Executive Deputy Commissioner
New York State Department of Environmental Conservation

Ronald Tramontano, Center Director, Center for Environmental Health
New York State Department of Health

Michael Burke, P.E., Director, Bureau of Public Water Supply Protection
New York State Department of Health

Richard Svenson, Director, Bureau of Community Sanitation and Food Protection
New York Department Of Health

Eileen Franko, Environmental Lead Program Coordinator
New York Department Of Health

Laura Sahr, Health and Safety Coordinator, Office of Facility Planning
New York State Education Department

Richard P. Mills, President of The University of the State of New York (SUNY) and the Commissioner of Education
New York State Education Department

Betsy Mokrzycki, Program Manager
City of Syracuse Lead Program

Lloyd F. Novick, M.D., M.P.H., Commissioner
Onondaga County Health Department

Robert L. Burdick, P.E., Environmental Health Responsibility
Onondaga County Health Department