

Foreward

I am pleased to submit the first annual report for HB 17-1306 - Safe Water In Schools Act for the period of July 2017 - January 2018. The legislation specifically requires the annual report to document:

"The number of grants that have been issued; the individual amounts and total amount of grant money awarded; and the number, types, names, and locations of public schools that received the grants; a summary of the test results; and any legislative proposals that the department believes to be warranted that would provide financial assistance to public schools to facilitate the testing for or remediation of high lead levels in drinking water."

The annual report is due each February 1 for years 2018 - 2021 and is provided to the following the House <u>Health</u>, <u>Insurance & Environment Committee</u> and Senate <u>Health & Human Services Committee</u>.

Patrick Pfaltzgraff, director Water Quality Control Division Colorado Dept. of Public Health and Environment February 1, 2018

Executive summary

HB17-1306 "Safe Water in Schools Act" provides funding for eligible public schools to test for the presence of lead in drinking water. The legislation required the Water Quality Control Division of the Colorado Department of Public Health and Environment to develop and implement the program. Subsequently, the division completed a robust stakeholder process and conducted a rulemaking hearing before the Water Quality Control Commission to establish the program and issue grants to schools for lead testing. Further, the division issued a request for applications on November 14, 2017 and received 22 applications totalling \$73,585 from two school districts. Combined these applications will sample 1680 fixtures in 22 schools that serve a student population of 7,500. Since the legislation allocated \$300k for grants, all applicants were funded and are currently in the contracting phase. Out of the 22 applications received, 17 were elementary and five were other schools. Because funding remained after the initial request for applications, applications for this fiscal year are still being accepted. See Appendix A for a complete list of applications and awards.

Background

Under the Colorado Primary Drinking Water Regulations, and specifically under the Lead and Copper Rule in Regulation 11, water suppliers are required to sample lead at designated "tier sites." These tier sites are typically single or multi-family homes. Schools that receive water directly from a city or other public water utility are not separately regulated under the Lead and Copper Rule, or for that matter, any other part of the Safe Drinking Water Act since the utility is the regulated entity. As a result, these schools are not required to sample for lead in their drinking water. Lead testing in schools is especially important because of the increased risk of delays in physical and mental development, lower IQ levels and brain damage in young children and infants who may be exposed to lead. Because of the amount of time children spend in schools and the serious health risks associated with lead exposure, it is critical that schools, particularly elementary schools, understand if lead is present in their drinking water. According to the Centers for Disease Control and Prevention April 2004 edition of Morbidity Mortality Weekly Review, "No safe blood level has been identified and all sources of lead exposure for children should be controlled or eliminated. Lead concentrations in drinking water should be below the U.S. Environmental Protection Agency's action level of 15 ppb." The division has also opted to use the value of 15 parts per billion (ppb) in the grant programs lead testing protocol.

Sampling in appropriate locations and utilizing the proper sampling procedures is essential to get high quality results for lead testing. Therefore, to be eligible for grant funding, schools must develop a sampling plan that considers the location of plumbing fixtures, type of plumbing materials (lead lines or lead solder) and how water flows in the school. The sampling plan is designed to assist with actual sampling, the interpretation of results and determination of proper remediation steps, if warranted.

The Safe Water in Schools Act helps schools with the cost of lead testing through grant funding. The legislation authorized up to \$300,000 for grants each state fiscal year for three years, pending available funds in the Water Quality Improvement Fund. The Water Quality Improvement Fund was originally created in 2006 by the General Assembly for the purpose of improving water quality in Colorado by providing grant funds for water quality improvement projects using civil penalties from water quality violations. The fund was amended in 2011 by HB11-1026 to authorize grants for stormwater management training and best practices training to prevent or reduce the pollution of state waters. In 2017, the fund was amended again to include funding for the Safe Water in Schools Act. Eligible public schools include 1) public schools not registered as a public water system; and 2) public schools that have not already tested for lead under the requirements of the 1991 federal Lead and Copper Rule or are not currently testing for lead. Grant recipients are required to follow the division's established lead

testing protocol and submit results to their local public health agency, supplier of water, school board and the division.

Rulemaking hearing

The Water Quality Control Commission is the administrative agency responsible for developing water quality policy in Colorado in a manner that implements the broader policies set forth by the legislature in the Colorado Water Quality Control Act, or in this case, the expanded use of the Water Quality Improvement Fund. Rulemaking is the formal process by which control regulations, water quality classifications, standards and all other binding regulations are adopted. Regulation 55, State Funded Water and Wastewater Infrastructure Programs, is the commission's regulation that provides rules for how the division must administer and implement the Water Quality Improvement Fund. When use of the fund is expanded beyond what is included in the current regulation, the division must conduct a rulemaking hearing to add the additional use. In short, the rulemaking hearing is a public process where the division engages stakeholders to create a thorough proposal for the commission to act upon. Because HB17-1306 added a new program, the division initiated a rulemaking hearing to amend Regulation 55 so the division could issue grants for lead testing. Below is the timeline of events leading to the commission adoption of revisions to the regulation.

Timeline		
Date	Activity	
May 2017	The division developed draft public school lead testing program proposal, including the testing protocol, to initiate the stakeholder process. In addition, a website for the proposed lead testing program was developed to inform stakeholders.	
June 8, 2017	HB17-1306 - Signed into law.	
June 22 and June 28, 2017	The division held two stakeholder meetings to solicit input on the draft public school lead testing program.	
July 10, 2017	Public comments based on the draft public school lead testing program due. The division received approximately 34 comments most of which involved clarity of the program and sampling process. Very few comments were about program implementation.	
July 20, 2017	The division held the final stakeholder meeting to outline the final proposal to the commission for revising Regulation 55.	
Aug. 8, 2017	Commission publicly noticed the rulemaking hearing for the public school lead testing program.	
Sept. 20, 2017	Written comments from the division due to the commission.	
Oct. 11, 2017	Responsive comments from public due to commission. The division received one comment that requested clarification with respect to the tie breaking criteria.	
Nov. 1, 2017	The division responded to comments and provided additional clarity regarding tie-breaking criteria for funding in the regulation.	
Nov. 13, 2017	The commission conducted the rulemaking hearing to adopt proposed revisions to include the public school lead testing program in Regulation 55.	

Nov. 14, 2017	Request for grant applications released.
Dec. 15, 2017	Initial application period closed. Additional applications accepted on a rolling basis for this fiscal year.

Stakeholder process

As previously mentioned, the division initiated a stakeholder process to develop a strong program that met the intent of the legislation and the commission's procedural requirements for revising the regulation. The division solicited stakeholder participation by publishing in various newsletters, sending emails to a large distribution group consisting of local water providers, local public health agencies, counties, non-governmental organizations, along with direct contact with schools and school associations both through our own email distribution list and also the Colorado Department of Education (see Appendix B for an example stakeholder email). The participation rate at each of the meetings averaged approximately 20 participants and consisted of local officials, public school representatives and public water systems. Additional analytics regarding the email outreach are included as part of Appendix B.

Stakeholder comments were recorded throughout the process including at each meeting and in writing via an online form. Comments were transcribed and then grouped by the following categories: (1) sampling protocol, (2) Regulation 55 changes and (3) the grant ranking proposal. Within each of these categories, comments were further broken into comment types as well as types of commenters (i.e. school employee, parent, water district) to identify themes that needed more attention, including program components that were of concern to specific groups of stakeholders. The division accepted and incorporated all comments and subsequently revised the proposal and exhibits. There were a few comments received that were in contradiction to the legislation, and so no modifications were made based on those comments.

Stakeholders and the division agreed that a streamlined review process should be utilized by the division to evaluate grant applications and prioritize funding requests in the event that the total dollar amount requested exceeded the funds available, i.e. \$300,000 in any one year. Three priorities were identified from the definitions within the legislation and then tie-breaking criteria were developed for use if needed. The three priorities are:

- 1. Oldest elementary schools.
- 2. Oldest schools that are not elementary schools.
- 3. Other schools.

The tie-breaking criteria involves considerations of financial affordability and readiness to proceed. The financial affordability criteria includes the percentage of students eligible for free and reduced cost lunches and the school district's median household income. The division did a pilot test of the application and scoring criteria with a volunteer school district to ensure that the instructions for the application were simple and not too complex or time consuming. Please see Appendix C for the final prioritization criteria.

Program implementation

On November 13, 2017 the commission approved revisions to Regulation 55 for the public school lead testing program. On November 14, 2017 the division released a request for application soliciting grant applications from public schools who met the eligibility requirements. The division solicited applications in the same manner used in the stakeholder process, which included various contacts lists such as local water providers, local public health agencies, counties, non-governmental organizations, along with a weekly newsletter through the Colorado Department of Education. The request for applications was open until December 15, 2017. At the time of closing, the division received 22 applications from two schools districts totaling 7,500 students. Please see Appendix A for a summary of the requests and awards.

Program report

Grant applications

The division received 22 applications from two school districts. Appendix A shows the specific number, types, names and location of each application.

Number of grants issued

The division issued grants to all 22 applications, which totaled \$73,585. Combined these applications will sample 1680 fixtures in 22 schools that serve a student population of 7500. Appendix A shows the total number of grants issued, the individual amounts provided on a per school basis, and the number, types, names and location of the public schools that received funding.

Summary of test results

At the time of this report, the division has not received any lead test results. However, the division has created an automated process for grantees to submit results based on the approved lead testing sampling plan that was submitted as part of their application. Sample results for lead samples should be received within 90 days of being sent to the lab. However, the date results are returned can vary depending on the certified lab used and the wait time to process samples.

Legislative proposals

The legislation directed CDPHE to report on any legislative proposal the agency believes to be warranted that would provide financial assistance to public schools to facilitate the testing for or remediation of high lead levels in drinking water. Since the division has yet to receive any lead testing results, the division does not have any proposal for additional funding for lead testing or remediation at this time. The division will continue to analyze data as it is received and provide any proposal per this requirement in the next annual report due February 1, 2019.

Appendices

- A. Lead testing applications and awards.
- B. Example stakeholder email and email analytics.
- C. Prioritization criteria.

APPENDIX A - Lead testing applications and awards

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
1	Byers Pre-K - 12	Byers SD	Pre-K - 12	444 East Front Street Byers, CO	\$ 5,000.00	\$ 5,000.00
2	Berthoud Elementary School	Thompson SD	Elementary	560 Bunyan Avenue Berthoud, CO 80513	\$ 3,400.00	\$ 3,400.00
3	BF Kitchen Elementary School	Thompson SD	Elementary	915 Deborah Drive Loveland, CO 80537	\$ 2,510.00	\$ 2,510.00
4	Big Thompson Elementary School	Thompson SD	Elementary	7702 West Highway 24 Loveland, CO 80537	\$ 2,705.00	\$ 2,705.00
5	Bill Reed Middle School	Thompson SD	Middle	370 West 4th Street Loveland, CO 80537	\$ 3,770.00	\$ 3,770.00
6	Carrie Martin Elementary School	Thompson SD	Elementary	4129 Joni Lane Loveland, CO 80537	\$ 2,795.00	\$ 2,795.00
7	Centennial Elementary School	Thompson SD	Elementary	1555 West 37th Street Loveland, CO 80538	\$ 3,860.00	\$ 3,860.00
8	Conrad Ball Middle School	Thompson SD	Middle	2660 North Monroe Avenue Loveland, CO 80538	\$ 3,665.00	\$ 3,665.00
9	Cottonwood Plains Elementary School	Thompson SD	Elementary	525 Turman Drive Fort Collins, CO 80525	\$ 4,025.00	\$ 4,025.00
10	Garfield Elementary School	Thompson SD	Elementary	720 Colorado Avenue Loveland, CO 80537	\$ 2,690.00	\$ 2,690.00
11	Ivy Stockwell Elementary School	Thompson SD	Elementary	175 5th Street Berthoud, CO 80513	\$ 2,870.00	\$ 2,870.00
12	Lincoln Elementary School	Thompson SD	Elementary	3312 North Douglas Avenue Loveland, CO 80538	\$ 3,065.00	\$ 3,065.00

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
13	Mary Blair Elementary School	Thompson SD	Elementary	860 East 29th Street Loveland, CO 80538	\$ 3,680.00	\$ 3,680.00
14	Monroe Elementary School	Thompson SD	Elementary	1500 North Monroe Avenue Loveland, CO 80538	\$ 3,560.00	\$ 3,560.00
15	Namaqua Elementary School	Thompson SD	Elementary	209 North Namaqua Avenue Loveland, CO 80537	\$ 3,680.00	\$ 3,680.00
16	Sarah Milner Elementary School	Thompson SD	Elementary	743 Jocelyn Drive Loveland, CO 80537	\$ 3,125.00	\$ 3,125.00
17	Stansberry Elementary School	Thompson SD	Elementary	407 East 42nd Street Loveland, CO 80538	\$ 2,915.00	\$ 2,915.00
18	Truscott Elementary School	Thompson SD	Elementary	211 West 6th Street Loveland, CO 80537	\$ 2,435.00	\$ 2,435.00
19	Turner Middle School	Thompson SD	Middle	950 Massachusetts Avenue Berthoud, CO 80513	\$ 2,975.00	\$ 2,975.00
20	Van Buren Elementary School	Thompson SD	Elementary	1811 West 15th Street Loveland, CO 80538	\$ 3,065.00	\$ 3,065.00
21	Walt Clark Middle School	Thompson SD	Middle	2605 Carlisle Drive Loveland, CO 80537	\$ 3,800.00	\$ 3,800.00
22	Winona Elementary School	Thompson SD	Elementary	201 South Boise Loveland, CO 80537	\$ 3,995.00	\$ 3,995.00
				Totals	\$ 73,585.00	\$ 73,585.00

Meeting notice - Drinking water lead testing at public schools

We are seeking input for the development of a grant program for lead testing at eligible public schools. We are holding meetings to inform and solicit feedback on the proposed rule, including the project prioritization system that will be used to distribute available funds. Please join our email list to receive updates. In the future, we will only send to those who have signed up on the list.

Meeting details

When

June 22, 2017 (2-4 p.m.)

June 28, 2017 (1-3 p.m.)

July 20, 2017 (1-3 p.m.) (to discuss the final proposal to the Water Quality Control Commission)

The first two webinars are the same information. The third and final webinar is when we will discuss the final proposal to the commission based on comments received.

Meeting materials - Materials to be discussed at the meeting are available on our website.

Rulemaking hearing

The Colorado General Assembly passed legislation (HB17-1306) to establish a lead testing program to assist public schools with conducting lead testing within the school's drinking water system. As a result, we are seeking stakeholder feedback and input for a lead testing in public schools grant program. Stakeholder input will be incorporated into a proposal for the Water Quality Control Commission. The commission will conduct a rulemaking hearing on November 13, 2017 to consider amendments to the existing rules of the Water Quality Improvement Fund (Regulation 55). The amendments to Regulation 55 will establish criteria for the award of grants to complete lead testing.

Email list - analytics

The division created a master email distribution list using contacts from our internal list of local public health agencies and partners as well as the master email list for the grants and loan unit. The original email went to over 2,000 email addresses and included the creation of a new list dedicated to the lead testing grant program. The lead testing grant program list has nearly 250 contacts that opted in to the list. Since June, six emails have been sent to this large group. The standard open rate, meaning how many recipients actually open (and read) the email was well above average. Average open rate for government is 24 percent, open rate for this list was near 38 percent, indicating that recipients are interested in the email content. This is further confirmed by the click rate, which documents how many times readers are clicking on web links provided in the email. The click rate for this email list is twice industry standard (at 6.8 percent vs the standard of 3.4 percent), denoting high interest in the content.



Lead testing at public schools Ranking prioritization (from Reg. 55)

APPENDIX (

Project Prioritization Criteria

If remaining funds are available after distribution of funds to Categories 1 thru 4, the following prioritization will be used.

Category 5 - Public school lead testing to detect the presence and concentration of lead in drinking water in a public school.

- Priority 1 Testing conducted in the oldest public elementary schools.
- Priority 2 Testing conducted in the oldest public schools that are not elementary schools.
- Priority 2 Testing conducted in all other public schools.

Additional prioritization criteria will include the age of the original constructed building. Tie breaking criteria will include financial/affordability, school district household median income, and readiness to proceed. Specific points available in each of these categories are found in Figure 1.

Project Prioritization Tables

A technical review of each application will be performed. Each applicant must submit items outlined in the request for application. After the division verifies the applicant's category and priority, applicants will be scored based on the ranking system found in Figure 1 if there are more applicant requests than funding.

Figure 1: Category 5 - Public school lead testing to detect the presence and concentration of lead in drinking water in a public school.

PRIORITIZATION FA	ACTOR POINTS					
School age eligibility based on originally constructed date (not the average age of the buildings)						
1 Oldest school*	1 point per year from date	1 point per year from date of original construction to the year the RFA is introduced.				
TIE BREAKER		POINTS				
Financial /Afford	Financial /Affordability					
Percentage of students eligible for the free/reduced lunch program per school**						
		100% - 90% 50				
		89% - 80% 40				
		79% - 70% 30				
		69% - 60%				
		59% - 50% 10				
		49% - 25% 5				

Less than 25%

School District Median Household Income (MHI)

2 Lowest district MHI*** Schools will be ranked from lowest district MHI to the highest district MHI with the lowest taking priority

Readiness to Proceed

3 The time a school can start the lead testing from the date of the award letter.

≤ 4 weeks	5
>4 weeks	0

0

NOTE: Projects are funded based on the highest points in prioritization factor 1. In the event that two or more projects are tied, the highest total in prioritization factor 2 scores will be used to break the tie. Should a tie between projects remain after sorting by the Financial Affordability scores, the School District MHI will be reviewed. Should a tie still remain, the Readiness to Proceed scores will be ranked from highest to lowest.

^{*}Data will be confirmed with Colorado Department of Education's BEST program facility assessment.

^{**} The Free and Reduced Lunch Program totals are calculated annually upon the fall pupil membership data as collected by the Colorado Department of Education.

^{***}The school district MHI is calculated using the latest 5 year American Community Survey data collected by the United States Census Bureau. Institute charter schools will be assigned the state average.