

Quality Assurance Project Plan

Lead Testing in Schools and Child Care Facilities WIIN 2107

New Mexico Environment Department

EPA Region 6

"Authorized under the Water Infrastructure Improvements for the Nation (WIIN) Act, the Lead Testing in School and Child Care Program Drinking Water Grant creates a voluntary program to assist with testing for lead in drinking water at schools and childcare programs."

Effective Fall 2024

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A2. Title and Approval

EPA Region 6 WIIN 2107 Lead Testing in Schools and Child Care Facilities,
New Mexico Environment Department
Fall 2024 - Summer 2028

Approving Officials: New Mexico

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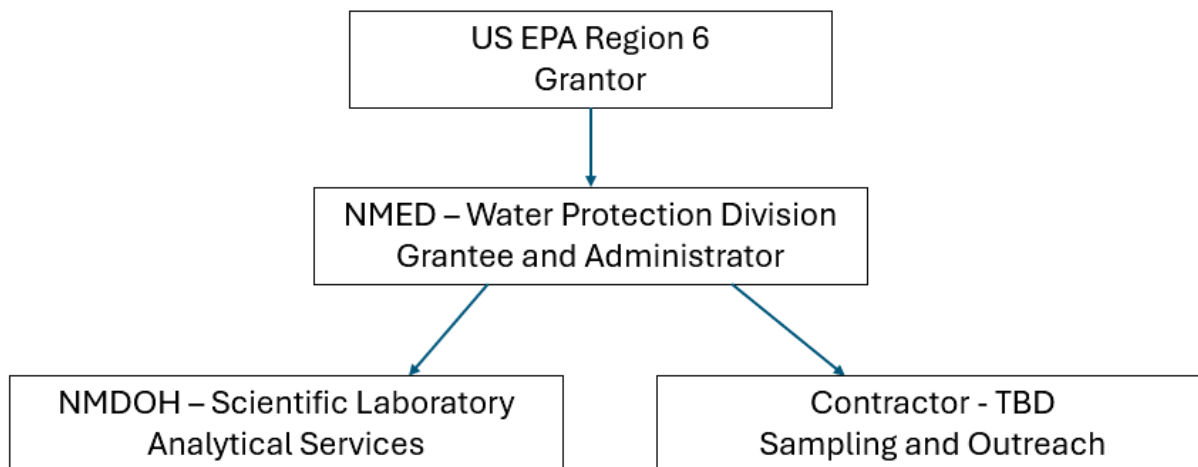
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A4. Project/Task Organization

Organization of the project and tasks begin with the grantor US EPA Region 6. EPA will provide guidance and oversight on the project. NMED's Water Protection Division will administer the grant for the state of New Mexico. Tasks are generally divided into outreach, sampling, analysis, reporting, and follow-up. While NMED staff will participate in outreach activities, NMED will hire a contractor to conduct outreach and sampling. NMDOH's Scientific Laboratory will conduct analytical testing of the drinking water samples and report results to NMED. NMED and/or the contractor will report results to the facilities and provide follow-up with facilities requiring remedial action.



A5. Problem Definition/Background

Authorized under the Water Infrastructure Improvements for the Nation (WIIN) Act, the Lead Testing in School and Child Care Program Drinking Water Grant creates a voluntary program to assist with testing for lead in drinking water at school and childcare program facilities. The grant will include approximately \$43.4 million in funding. With nearly 56 million Americans, including 53 million children, spending their days in schools, school officials need to know if the drinking water students, teachers, and staff consume contains elevated levels of lead because exposure to lead can cause serious health problems, particularly for young children. The U.S. Environmental Protection Agency (EPA) developed the *3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance* (EPA 815-B-18-007; October 2018) to assist schools in safeguarding their occupants' health <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit>. The guide provides information schools need to:

- Identify potential sources of lead in their facilities
- Monitor school drinking water for elevated lead levels
- Assist the facility with the resolution of identified problems if elevated lead levels are found
- Communicate about their lead control programs

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 in addition to middle aged men and women. Drinking water represents one means of lead exposure. Some drinking water pipes, taps, and other outlets (apparatus dispensing water) in buildings and homes may contain lead. The lead in such plumbing may leach into water and pose a health risk. The more time water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into water. As a result, facilities with on again/off again water use patterns, such as schools and businesses, may have elevated lead concentrations.

The only way to be certain that lead is not a problem in a particular home, school, or building is to test various drinking water outlets for the metal. If lead problems are found, they can be addressed and corrected. This Quality Assurance Project Plan (QAPP) is intended to aid in determining whether a facility has a lead-in-drinking-water problem. This QAPP is designed to provide instructions for sampling water for lead and correcting lead issues when found. In addition, the QAPP provides information concerning the sources and 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 of your facility.

Lead is a toxic metal that can be harmful to human health when ingested or inhaled. Even small doses of lead can be harmful. Unlike most other contaminants, lead can be stored in bones and later released into the bloodstream. Thus, even small doses can accumulate and become significant. The groups most vulnerable to lead include fetuses and young children.

Groups affected by lead:

- **Pregnant women and fetuses:** Accumulated lead stored in mothers may damage a child before it is born, causing a lower birth weight and slowing down normal physical and mental development. Studies suggest that even low levels in the mother may later affect an infant's mental performance.
- **Young Children:** Children, especially those under the age of six, are particularly sensitive to the effects of lead. Since their bodies are still developing, small children process lead differently and tend to absorb more than adults. Therefore, lead can affect small children at smaller doses. Even at low levels of lead exposure, children may experience lower IQ levels, impaired hearing, reduced attention span, and poor classroom performance. At high levels, lead can seriously damage the brain.
- **Middle-aged Men and Women:** Studies have found an association between blood-lead levels and slight increases in blood pressure among adults.

The degree of harm from lead exposure depends on several factors including frequency, duration, and dose of the exposure(s), and individual susceptibility factors (age, previous exposure history,

nutrition, health). In addition, the degree of harm depends on one's total exposure to lead from all sources in the environment, including air, soil, dust, food, and water. Lead in drinking water can be a significant contributor to overall exposure to lead, particularly for infants whose diets consist of liquids made with water, such as baby food formula.

Lead can get into drinking water after the water leaves the treatment plant or well and contacts the plumbing materials containing lead. The physical/chemical interaction that occurs between the water and the plumbing is referred to as corrosion. The extent to which corrosion occurs contributes to the amount of lead that can accumulate in the drinking water. Some communities have lead components in the distribution system (lead joints in cast iron mains, pipes, service connections, pigtails, and goosenecks). However, the public water supplier is responsible for making sure that the distribution system under the utility's control does not contribute harmful amounts of lead. Interior plumbing, soldered joints, and various drinking water outlets that contain lead materials are the primary contributors of lead in drinking water.

The corrosion of lead tends to occur more frequently in "soft" water and acidic water. Other factors, however, also contribute to the corrosion potential of the water, including water velocity, temperature, alkalinity, chlorine concentration, age and condition of the plumbing, and the amount of time the water is in contact with the plumbing. Public water system officials routinely undertake activities aimed at controlling the corrosion characteristics of their water supplies. Their treatment activities can lead to a protective coating of minerals being formed on the inside layer of the pipes, thereby insulating the drinking water, in effect, from direct contact with the lead. The activities undertaken by individuals and building owners/operators to identify and repair plumbing issues are also critical.

Although public water systems that supply water to most schools may meet EPA's lead standards, lead can still get into school drinking water. As water moves through a school's plumbing system, lead can leach into the drinking water from plumbing materials and fixtures that contain lead. Testing is the best way for schools to know if there are elevated levels of lead in a facility's drinking water. New Mexico is continuing a voluntary drinking water testing program at schools and childcare facilities as part of our goal to eliminate lead in drinking water.

For this voluntary lead testing program, the New Mexico Environment Department (NMED) is working with the New Mexico Department of Health (NMDOH), New Mexico Public Education Department (NMPED), and drinking water utilities that service participating facilities to identify and implement lead sampling at schools within NM. As part of this sampling initiative, the plan includes developing an inventory of drinking water coolers and taps used for food preparation and cooking in each school's water system. With the candidate facilities consent and approval, NMED is planning to sample lead levels within each school, day care facility, and other similar facilities who voluntarily agree to participate in the program. Samples will be collected and analyzed at no cost to the schools, and final laboratory results will be shared with each school along with a suggested action plan for the school's consideration.

A6. Project/Task Description

The project will consist of 5 parts:

Part 1. Identify and rank priority of schools, day care facilities, and other similar facilities based on building age and percent subsidized lunches. Environmental justice issues will be considered, as well. Conduct outreach to encourage facilities to participate in the program.

Part 2. Create a plumbing profile for each facility to identify potential sampling locations and confirm if any water coolers contain lead components by cross referencing the model number with the information in Appendix A (from Appendix B of EPA's document titled *3Ts for Reducing Lead in Drinking Water in Schools*).

Part 3. Conduct sampling of water coolers and kitchen sinks and submit samples for lead analyses.

Part 4. Report results to facilities and communities.

Part 5. Follow up and assist facilities requiring remedial efforts.

It is estimated that the identification of schools, day cares, and other similar facilities will begin in Fall/Winter 2024/2025 (Part 1). The NM Department of Health previously identified 165 schools that will be tested for lead in drinking water based on the ranking process; the NMDOH-prioritized facilities are listed in Appendix B. NMED will attempt to sample all NMDOH-prioritized facilities, as well as any other facility in the region who voluntarily agrees to participate in the program.

Once facilities are identified, a plumbing profile and sampling plan (Part 2) will be generated by the facility and/or contractor in cooperation with the program to identify potential sampling locations within the facility, as well as water coolers listed in Appendix A.

Sampling and analyses of drinking water will begin in 2025 at schools, day care facilities, and other similar facilities (Part 3). Reporting of results to officials will be provided following receipt of the SL's report; timing will be dependent on SL's reporting times (Part 4). NMED will follow up with facilities requiring remediation and assist in those efforts (Part 5).

A7. Quality Objectives and Criteria

The establishment of data quality objectives (DQOs) ensures that the NMED makes decisions relating to water quality management that are:

- consistent with the mission, goals and objectives of the NMED;
- based on proper application of policy and guidance;
- based on all available pertinent information;

- based on a thorough understanding of the information; and
- based on accurate information.

DQOs are criteria that aid the decision maker (staff) to make data-based decisions while limiting the occurrence of errors. Drinking water sampling and analyses will be conducted by trained staff in accordance with the procedures specified in Section B2 of this QAPP. Extensive review of the data and information collected will provide sufficient quality to ensure a high level of confidence in the resulting decisions. NMED will follow its Drinking Water Bureau's Quality Management Plan, most recently approved in January 2024.

A8. Training

The samplers associated with this project will be trained on collecting demographic data, identifying water coolers that contain lead by cross referencing the model number of the cooler with Appendix A, collecting samples, completing the analysis request form/chain of custody documents, and shipping samples.

Training will consist of conference calls, webinars, and training materials to ensure that all samplers are following approved sampling and shipping procedures based on the guidance in EPA's *3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities*. The Scientific Laboratory will provide guidance and training for the samplers regarding best practices for completing the analysis request form/chain of custody documents. After the successful completion of these trainings, a sampler will be allowed to collect samples in the field.

A9. Documents and Records

Any updates to the QA Project Plan for EPA WIIN 2107 Grant will be communicated and disseminated to all individuals associated with the project.

The New Mexico State Scientific Laboratory (SL) will provide the Chain of Custody Record (CoC) and sample forms used to document samples collected under this project. Laboratory reports will be generated by SLD for all samples received. Data will be released by SLD after internal quality control reviews. Each set of samples from each individual school, day care, or similar facility will be assigned a unique project number by SL upon arrival.

Once data are released by the SL, the NMED will be notified where a notification report will be generated and provided to facility administrators, as well as to the public for transparency purposes. Should any sample concentration exceed the Action Level of 0.015 mg/L for lead, NMED will provide guidance and support for remediation at the facility.

Electronic records of chemical analyses shall be kept for not less than 10 years along with field logs, sample demographics, and field notes. These documents will be kept on the NMED secure

computer network. Quarterly and annual progress reports will be generated to provide the status of the project along with any other issues or concerns.

B1. Sampling Process Design

NMED has identified facilities and a ranking/priority process for schools that will be tested for lead in drinking water based on building age and percent subsidized lunches (the ranking table is located in Appendix B). At each site, the number of samples is dependent on the age of the facility, the size of the facility, number of water taps, etc. A facility could have anywhere from 4 to 15 or more water taps. Based on this estimate, any facility could potentially have anywhere from 8 to 30 or more samples to be collected and analyzed. New Mexico may need to cap the number of samples to 30 per building based on the plumbing profile to ensure completion of the project and coverage of all identified facilities. Sampling plans will be communicated with each facility before sample collection, and results will be communicated to each facility following receipt of analytical results.

Samples that will be collected are finished drinking water collected from a dispenser such as a water fountain, water cooler, or water tap. Once facilities have been identified, a plumbing profile and sampling plan will be utilized to identify appropriate sampling locations within the facility and determine the exact number of samples.

Module 4 of EPA's *3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities* provides a plumbing profile questionnaire that will be used assist with determining whether lead is likely to be a problem in a facility (Appendix C). A separate plumbing profile may be needed for each building, addition, or wing of the facility, especially if the construction of each took place at different times. The questions in the left column will help to determine whether lead is likely to be a problem in a facility and will enable sampling effort prioritization. The middle column is where questions will be answered. The right column will be used as a guide to interpret the answers and gain a better understanding of the significance of possible answers. Some of the questions in this questionnaire may not apply to a facility for various reasons; those questions should be skipped. The 3T's plumbing profile questionnaire can be found at https://www.epa.gov/system/files/documents/2021-08/module_4_plumbing_profiles_508.pdf.

Should a sampling location be identified as a water cooler referenced in Appendix A, the sampling location will not be sampled, and the facility will be notified that a water cooler within its facility contains lead, along with the recommendation that it immediately be made unavailable and removed.

The analytical parameter of interest that will be measured will be total lead in finished drinking water using EPA Method 200.8.

B2. Sampling Methods

Drinking water samples from school and day care facility drinking fountains and kitchen sinks will be collected for lead analyses. Samples will be collected after an eight to eighteen-hour stagnation period.

Note that this section contains recommendations that are generalized for typical plumbing configurations. Also, schools and childcare facilities should not use sample results from one sampling location to characterize potential lead exposure from all other outlets in their facility. This approach could miss localized lead problems that may not be identified.

Step 1: Initial First Draw Samples

First draw samples will be collected from fixtures throughout the building that are used for human consumption. EPA strongly recommends collection of these samples from all outlets used for drinking or cooking, prioritizing the high-risk outlets (i.e., fixtures that are known to or may potentially contain lead and those used most frequently). Water fixtures such as hand sinks, laboratory sinks, janitorial sinks, mop bucket basins, and irrigation spigots should not be sampled unless they are regularly used for drinking. The plumbing profile will help pinpoint the high-risk fixtures and prioritize sample collection.

The first draw sample collected in Step 1 is representative of the water that may be consumed at the beginning of the day or after infrequent use. This protocol maximizes the likelihood that the highest concentrations of lead will be found because the first 250-ml sample is collected after overnight stagnation.

Requirements for first draw samples are as follows:

- All samples must be collected before the facility opens and before the fixtures have been used. Based on EPA guidance, the water must sit stagnant for an 8- to 18-hour period.
- One 250-ml sample will be collected at each fixture. Since this is a first draw sample, collection of the sample must occur immediately upon opening the faucet or valve.

Step 2: Flush Samples

Flush sampling will be conducted to determine if lead concentration results are related to the fixture or interior plumbing components. Flush samples generally involve the collection of water from an outlet where the water has run for 30 seconds. The purpose of Step 2 is to determine where lead is making contact with drinking water (i.e., fixtures versus interior plumbing) so that appropriate corrective measures can be taken.

Requirements for flush samples are as follows:

- As with initial first-draw samples, flush samples must be collected before a facility opens and before any water is used. For best results, flush samples from different outlets that are in close proximity should be collected on different days. For drinking fountains or other fixtures that are manifolded closely together, a single flush sample may be representative of the shared interior plumbing.
- The sampler should be careful to maintain a consistent rate of flow when collecting flush samples.
- Open the tap and let the water run for 30 seconds. Then, take a 250ml sample. Make sure to label this sample bottle as the flush sample.

Requirements for both first draw and flush samples are as follows:

- Again, the sampler must collect all water samples before the facility opens and before any water is used. The water must sit in the pipes unused for at least 8 hours but not more than 18 hours before a sample is collected.
- The sampler must learn how water flows in each facility. If there are multiple floors, the sampler will collect samples from the bottom floor and continue up. Sample collection should start closest to the water main and work outwards.
- The sampler must follow the instructions provided by the laboratory for handling sample containers to ensure accurate results.
- The sampler must assign a unique sample identification number to each sample collected following SL protocol and label each sample bottle. The sampler must fully fill all sample information forms provided by SL.
- The sampler or facility must not remove aerators prior to sampling. Potential sources of lead may be missed if aerators are removed, since debris could be contributing to the lead in drinking water if particles containing lead are trapped behind aerator screens.
- The sampler or facility must not flush water prior to collection of first draw sample. Flushing can be a tool to improve water quality, especially after long holidays or weekends. However, flushing prior to sampling may provide results that are not representative of actual lead concentrations in the water.

- The sampler or facility must not close the shut-off valves to prevent their use prior to sample collection. Minute amounts of scrapings from the valves can produce results showing higher-than-representative lead concentrations in the water.

Recording sample information is critical to tracking and managing water quality year-over-year. Based upon facility ranking and plumbing profiles, the number of samples to be collected at each facility will be determined and the established point of contact for the facility will be identified.

Sampling Details

Drinking water samples will be collected in 250 milliliter HDPE sampling containers rated for metals testing for EPA methods. Sample analysis will be conducted at the SL located in Albuquerque, NM. The samples will be analyzed by EPA Method 200.8.

Water samples must be collected before the facility opens and before any water is used from the outlet being sampled. The water must sit in the pipes unused for at least 8 hours, but not more than 18 hours, before a sample is collected. Samples will not be collected in the morning after vacations, weekends, or holidays because the water will have remained stagnant for too long and would not be considered representative of the water used for drinking during most of the days of the week. Further information regarding sample sizes and stagnation periods can be found in Modules 4 and 5 of EPA's *3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities*.

For collection of samples from a stagnant sampling location, the selected dispensers will be flushed using the calculated flush times from the table below the day prior to sample collection by using the length of pipe and diameter from the main to the first sample tap in the facility.

Table 1: Calculated Flush Times (minutes) at 2 gpm for Various Line Sizes (inner diameter (ID) provided in inches) (Source: <https://www.epa.gov/sites/default/files/2021-01/documents/cft-cfv-tap-sampling-815b21001.pdf>)

Line Length (feet)	3/8" ID	1/2" ID	3/4" ID	1" ID	1 1/2" ID	2" ID	2 1/2" ID	3" ID	4" ID
5	0.01	0.03	0.1	0.1	0.2	0.4	0.6	0.9	1.6
10	0.03	0.1	0.1	0.2	0.5	0.8	1.3	1.8	3.3
25	0.1	0.1	0.3	0.5	1.1	2.0	3.2	4.6	8.2
50	0.1	0.3	0.6	1.0	2.3	4.1	6.4	9.2	16.3
100	0.3	0.5	1.1	2.0	4.6	8.2	12.7	18.4	32.6

Note: some water systems and state primacy agencies have applied a **5-minute flush time** before sample collection. This may be excessive, appropriate, or insufficient depending on the circumstances at that sample point.

Samples will **NOT** be preserved in the field due to safety issues regarding the presence of concentrated nitric acid in a facility where children are present. Samples that are preserved to pH<2 with nitric acid can be held for a maximum of 180 days if the sample is preserved within 14 days of collection. SLD will chemically preserve the samples to pH<2 with nitric acid upon arrival at the lab.

B3. Sample Handling and Custody

Prior to sampling, the sampler will ensure that each fountain/faucet to be sampled is bagged and labeled with a "DO NOT USE" label to provide a minimum of 8-hours of inactivity prior to the collection of the drinking water sample. The minimum 8-hour inactivity will be verified by the sampler prior to collection through comparison of the date and time on the "DO NOT USE" label with the current date and time. A sample will be collected following verification.

Samples will be collected at the predetermined sampling locations and documented on the CoC form. Should a sampling location not be available, an alternate location may be chosen in the field and documented on the CoC. Each individual 250 milliliter sample container will be placed into the packaging provided by the laboratory, which may be a sealable quart sized plastic bag.

After all samples have been collected and sealed in their packaging, the SLD-provided CoC will be completed, and the sampler may make copies of these forms to be kept by the facility point of contact. The original copy will be placed in a plastic bag inside the cooler and then sealed with a custody seal. The cooler will then be delivered to a pre-determined shipping service location for pick up. The sampler will collect the receipt from the shipping location that the sampling cooler has been dropped off and is ready for shipment to the SLD.

Samples can be held for a maximum of 14 days without preservation with nitric acid. Should a sample be held greater than a maximum of 14 days without preservation, the sample will be rejected by the laboratory as unable to process due to exceeding unpreserved sample holding time. Sampling will be conducted Tuesday through Friday. All samples will be sent to SLD as soon as the mailer box is full.

B4. Analytical Methods

After samples are collected, they will be sent via a pre-determined parcel service's ground shipping to the SL where analyses will be conducted. Upon receipt by the SL, samples will be received and logged in using their standard operating procedure for sample tracking. Samples will then be preserved with nitric acid to a pH<2 if they are received by the laboratory within 14 days of collection. SLD will analyze for the presence of total recoverable lead in finished drinking water by using EPA Method 200.8.

The routine turnaround time for analytical results is less than 180 days after sample receipt. The holding time for a preserved lead sample is 180 days.

B5. Quality Control

Quality control procedures defined by the NM-DOH Quality, Safety, Security and Emergency Preparedness 101 SOP: Chemistry Bureau Quality Assurance Plan will be followed during sample receiving and log-in, sample preservation, and sample analysis.

Finished drinking water samples for lead analyses will undergo quality control checks at sample receiving and log-in. The sample coordinator will confirm the completeness of the chain of custody, sample identification, and holding time.

Should any issues arise during sample receiving and log-in, such as leaking containers, incorrect sample identification codes, excessive sample holding times, or missing paperwork, SL's sample coordinator will inform the NMED Reporting team.

SLD will follow their internal quality control practices regarding EPA Method 200.8. Should any quality control issues arise during sample analysis, such as instrument failures, spilled samples, carry-over issues, or quality control failures, SL's sample coordinator will inform the NMED Reporting team.

Each batch of samples undergoing analyses under EPA Method 200.8 using inductively coupled plasma-mass spectrometry for the analysis of lead will have the following quality control samples associated with it:

Blank

Laboratory Control Samples (LCS) Matrix Spike

Matrix Spike Dup

B6. Instrument/Equipment Testing, Inspection, and Maintenance

Instruments will be maintained in accordance with the manufacturer's recommendations and detailed in the instrument user's manual.

B7. Instrument/Equipment Calibration and Frequency

Instrument/Equipment calibration and frequency will follow EPA Method 200.8 recommendations and SLD's QMP. Records of calibration shall be maintained by SLD.

B8. Inspection/ Acceptance of Supplies and Consumables

The package will have a sealed security tape and show no signs of tampering; the bottles can then be used for the study. The preparation and packaging of the bottles will be performed by the sampling team at the SL.

Supplies and consumables utilized by the SL will follow EPA Method 200.8 and the laboratory's internal quality control measures.

B9. Non-direct Measurements

The types of data needed to implement this project will consist of physical locations of buildings, locations of plumbing appurtenances (water coolers, dispensers, taps, etc.), facility points of contact, and documentation of any water coolers that are found in the facility that match coolers identified in Appendix A.

Limitations on the use of these data will be dependent on what is found in the facility, the availability of sample taps when the samples are to be collected, and availability of facility points of contact. The data will be stored in the NMED password protected computer network.

B10. Data Management

All data will be kept in locked cabinets and on password-protected computers. All databases with identifying information will be password protected. Networks are protected with a firewall to prevent unauthorized access to Agency networks.

In the field, paper documents will be secured using either the locking automobile or secured hotel room. Upon collection of samples, the filled CoC will be sent to the SL. Upon receipt of the samples and paperwork by the SL, samples received will be checked against unique sample numbers matching the sample inventory list and verified that chain of custody has been completed.

After analysis by the SL, the raw data will undergo quality assurance reviews. After quality assurance reviews have passed, a report will be generated from SL and sent to the data manager. The SL report will be generated as a MS Excel file that can be loaded into the database. The reporting team will ensure that the data is placed into the Lead in Schools database and website, and that it is reported back to the facility and NMED management. During this data entry step, data will be examined for outliers, implausible values, and missing data. The analytical lead concentration results will be presented in micrograms per liter ($\mu\text{g/L}$). NMED will provide verbal notification to any facility with a lead concentration greater than the lead action level of 15 $\mu\text{g/L}$ so that facility can take action and plan for remediation.

The analytical reports for samples - Metals by EPA Drinking Water Method 200.8 - ICP/MS and the notification form files will be stored on the secured server when generated by SL and are subject to audit by the program.

New Mexico staff participating in this project will have access to the password protected web-based database where these data are not shared off-site with anyone. Electronically entered facility information can be transferred and stored via password protected NMED servers and cannot be accessed except by authorized project staff. Only the program staff who are involved in data analysis will have access to database.

C1. Assessments and Response Actions

Sample results will be reviewed to prioritize outlet removal and remediation, if required. Outlets with elevated lead levels should be immediately removed from service. While options are available to continue use short-term, such as utilizing a flushing plan or providing bottled water for children and staff, the fountain/faucet should be replaced as soon as possible.

If initial first draw sampling results reveal high lead levels in the 250-mL sample for a given outlet, a contributing source of the elevated lead levels could be debris in the aerator or screen of the outlet. By cleaning the aerator or screen and retesting the water following the initial first draw sampling procedures, the debris can be identified as a contributor to the elevated lead levels.

Audits of data quality will be conducted by the SL as analytical results are generated and will undergo the laboratory's internal quality control procedures. SLD may conduct data quality assessments of the overall sample receiving process and reporting process such that the project manager can take appropriate measures to address concerns early in the sampling program.

Self-assessments will be conducted by the sampling team to assess how the field data recording are occurring along with a review of the overall sampling process from sample tap identification to final sampling. Should errors be identified, or additional procedures be initiated regarding data collection, sampling or shipping, the project manager will inform all members of the project team of any changes to procedure or methods immediately. These changes will then be reflected in the QAPP.

C2. Reports to Management

Reports to EPA Management will be created on a quarterly basis. Data reported to management will consist of the following:

- Number of schools selected for sampling
- Number of schools sampled
- Number of samples generated
- Pending number of samples
- Number of completed reports
- Number of water coolers matching the model number listed in Appendix A. •
- Number of samples with lead action level exceedances

These reports will be prepared by the project manager or designated representative. The recipients of these reports will be the New Mexico Environment Department and EPA.

D1. Data Review, Verification, and Validation

The criteria used to review and validate laboratory data and final analytical results will reside with the SL and their internal data validation procedures. Most samples are expected to be accepted

except for samples surpassing the 14-day holding period, samples missing their identification label, or leaking samples which will be rejected.

D2. Verification and Validation Methods

The process for verification and validation of data will be determined by SL's quality control procedures. The SL will be the primary location where quality control checks regarding the raw samples will be conducted for this project. SL will confirm data on the CoC form and compare it to the samples received. If physical samples received match the data entered on the chain of custody form, further processing of the samples can occur. Should data on the chain of custody form not match up with the samples collected, SLD will contact the project manager for further action.

After results have undergone quality control reviews, analytical data will be entered into a report generated by the SL for each facility. This report will be referred to as the laboratory report. These data will then be sent to the web reporting portal where a summary sheet of the data will be generated such that the entity, facility, and water system will be notified of the results.

D3. Reconciliation with User Requirements

Data obtained from this project will assist in providing answers to the following questions:

1. Does the facility have any water coolers that match the model numbers in the table in Appendix A?
2. Do the sampled fountains/faucets within a facility provide drinking water that contains lead concentrations greater than 1 µg/L?
3. Do the sampled fountains/faucets within a facility provide drinking water that contains lead concentrations greater than the action level of 15 µg/L?
4. If lead concentrations in drinking water are identified, are they related to the sampled plumbing fixture or the plumbing infrastructure of the facility?

The data quality outlined in this QAPP is sufficient to answer these questions. The data will assist the facility and water system with information to make decisions on the removal and replacement of suspected water coolers or additional corrective actions to reduce potential exposures to lead in drinking water.

Appendix A: List of Water Coolers and Lead Components

https://www.epa.gov/system/files/documents/2021-08/module_4_lead_water_coolers_banned_in_1988_5081.pdf

EBCO Manufacturing

All pressure water coolers with shipping dated from 1962 through 1977 have a bubbler valve containing lead. The units contain a single 50-50 tin-lead solder joint on the bubbler valve. Model numbers for coolers in this category are not available.

The following models of pressure bubbler coolers produced from 1978 through 1981 contain one 50-50 tin lead solder joint each.

CP3	DP15W	DPM8	7P	13P	DPM8H	DP15M	DP3R	DP8A
DP16M	DP5S	C10E	PX-10	DP7S	DP13SM	DP7M	DP7MH	DP7WMD
WTC10	DP13M-60	DP14M	CP10-50	CP5	CP5M	DP15MW	DP3R	DP14S
DP20-50	DP7SM	DP10X	DP13A	DP13A-50	EP10F	DP5M	DP10F	CP3H
CP3-50	DP13M	DP3RH	DP5F	CP3M	EP5F	13PL	DP8AH	DP13S
CP10	DP20	DP12N	DP7WM	DP14A-50/60				

Halsey Taylor

Lead solder was used in these models of water coolers manufactured between 1978 and the last week of 1987:

WMA-1	SCWT/SCWT-a	SWA-1	DC/DHC-1
S3/5/10D	BFC-4F/7F/4FS/7FS	S300/500/100D	

The following coolers manufactured for Haws Drinking Faucet Company (Haws) by Halsey Taylor from November 1984 through December 18, 1987, are not lead-free because they contain 2 tin-lead solder joints. The model designation for these units are as follows:

HC8WT	HC14F	HC6W	HWC7D	HC8WTH	HC14FH	HC8W	HC2F	HC14WT
HC14FL	HC14W	HC2FH	HC14WTH	HC8FL	HC4F	HC5F	HC14WL	HCBF7F
HC4FH	HC10F	HC16WT	HCBF7HO	HC8F	HC8FH	HC4W	HWCZ	

Lead Lined Tanks

https://www.epa.gov/system/files/documents/2021-08/module_4_lead_water_coolers_banned_in_1988_5081.pdf

Prior to publication of the January 1990 list, EPA determined that Halsey Taylor was the only manufacturer of water coolers with lead-lined tanks. Below provides a listing of model numbers of the Halsey Taylor drinking water coolers with lead-lined tanks that had been identified by EPA as of January 18, 1990.

Based upon an analysis of 22 water coolers at a U.S. Navy facility and subsequent data obtained by EPA, EPA believes the most serious cooler contamination problems are associated with water coolers that have lead-lined tanks.

Since the LCCA required the CPSC to order manufacturers of coolers with lead-lined tanks to repair, replace, or recall and provide a refund of such coolers, the CPSC negotiated such an agreement with Halsey Taylor through a consent order published on June 1, 1990 (at 55 FR 22387). The consent agreement calls on Halsey Taylor to provide a replacement or refund program that addresses all the water coolers listed below as well as "all tank- type models of drinking water coolers manufactured by Halsey Taylor, whether or not those models are included on the present or on a future EPA list." Under the consent order, Halsey Taylor agreed to notify the public of the replacement and refund program for all tank type models.

Currently, a company formerly associated with Halsey Taylor, Scotsman Ice Systems, has assumed responsibility for replacement of lead-lined coolers previously marketed by Halsey Taylor. If a school or childcare facility has one of the Halsey Taylor water coolers noted below, contact Scotsman Ice Systems to learn more about the requirements surrounding its replacement and rebate program.

Scotsman Ice Systems
775 Corporate Woods Parkway Vernon Hills, IL 60061
PH: (800) SCOTSMAN or 800-726-8762
PH: (847) 215-4500

Halsey Taylor Water Coolers with Lead- Lined Tanks

The following six model numbers have one or more units in the model series with lead-lined tanks:

WM8A	WT8A	GC10ACR	GC10A	GC5A	RWM13A
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The following models and serial numbers contain lead-lined tanks:

WM14A Serial No. 843034	WM14A Serial No. 843006	WT11A Serial No. 222650
WT21A Serial No. 64309550	WT21A Serial No. 64309642	LL14A Serial No. 64346908

Appendix B: School Ranking Table

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
ALAMOGORDO PUBLIC SCHOOLS	NORTH ELEMENTARY	395	100.0%	62.8%	N/A	0.0%	5	yes
ALAMOGORDO PUBLIC SCHOOLS	ACADEMY DEL SOL ALT.	152	84.1%	52.6%	N/A	15.9%	2	yes
ALBUQUERQUE PUBLIC SCHOOLS	RIO GRANDE HIGH	1562	82.4%	51.5%	N/A	17.6%	12	yes
ALBUQUERQUE PUBLIC SCHOOLS	HIGHLAND HIGH	1128	89.0%	55.6%	N/A	11.0%	10	yes
ALBUQUERQUE PUBLIC SCHOOLS	LOS PADILLAS ELEMENTARY	208	100.0%	68.0%	N/A	0.0%	6	yes
ALBUQUERQUE PUBLIC SCHOOLS	WEST MESA HIGH	1698	82.3%	51.4%	N/A	17.7%	5	yes
ALBUQUERQUE PUBLIC SCHOOLS	LOS PUENTES CHARTER	146	100.0%	65.1%	N/A	0.0%	3	yes
ALBUQUERQUE PUBLIC SCHOOLS	POLK MIDDLE	288	96.0%	60.0%	N/A	4.0%	3	yes
ALBUQUERQUE PUBLIC SCHOOLS	MARY ANN BINFORD ELEMENTARY	679	98.6%	61.6%	N/A	1.4%	2	yes
ALBUQUERQUE PUBLIC SCHOOLS	JIMMY CARTER MIDDLE	1007	91.9%	57.4%	N/A	8.1%	2	yes
ALBUQUERQUE PUBLIC SCHOOLS	FREEDOM HIGH	147	86.0%	53.8%	N/A	14.0%	2	yes
ALBUQUERQUE PUBLIC SCHOOLS	EL CAMINO REAL ACADEMY	316	100.0%	63.2%	N/A	0.0%	1	yes
ALBUQUERQUE PUBLIC SCHOOLS	SCHOOL ON WHEELS	85	100.0%	63.2%	N/A	0.0%	1	yes
ALBUQUERQUE PUBLIC SCHOOLS	WHERRY ELEMENTARY	405	100.0%	77.3%	N/A	0.0%	1	yes
ALBUQUERQUE PUBLIC SCHOOLS	ROBERT F. KENNEDY CHARTER	349	95.2%	59.5%	N/A	4.8%	1	yes
ALTURA PREPARATORY SCHOOL	ALTURA PREPARATORY SCHOOL	61	100.0%	62.9%	N/A	0.0%	2	yes
ARTESIA PUBLIC SCHOOLS	ROSELAWN ELEMENTARY	170	80.6%	71.2%	9.4%	19.4%	1	yes
AZTEC MUNICIPAL SCHOOLS	MCCOY AVENUE ELEMENTARY	400	95.3%	59.6%	N/A	4.7%	4	yes
AZTEC MUNICIPAL SCHOOLS	PARK AVENUE ELEMENTARY	423	85.1%	53.2%	N/A	14.9%	3	yes
AZTEC MUNICIPAL SCHOOLS	LYDIA RIPPEY ELEMENTARY	451	93.3%	58.3%	N/A	6.7%	2	yes
BELEN CONSOLIDATED SCHOOLS	JARAMILLO ELEMENTARY	325	100.0%	65.5%	N/A	0.0%	3	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
BELEN CONSOLIDATED SCHOOLS	GIL SANCHEZ ELEMENTARY	306	87.5%	54.7%	N/A	12.5%	2	yes
BELEN CONSOLIDATED SCHOOLS	BELEN MIDDLE	552	83.5%	52.2%	N/A	16.6%	2	yes
BELEN CONSOLIDATED SCHOOLS	DENNIS CHAVEZ ELEMENTARY	280	100.0%	63.4%	N/A	0.0%	1	yes
BELEN CONSOLIDATED SCHOOLS	LA MERCED ELEMENTARY	465	83.8%	52.4%	N/A	16.2%	1	yes
BERNALILLO PUBLIC SCHOOLS	COCHITI ELEMENTARY	193	100.0%	63.5%	N/A	0.0%	2	yes
BERNALILLO PUBLIC SCHOOLS	BERNALILLO MIDDLE	429	90.6%	56.6%	N/A	9.4%	2	yes
BLOOMFIELD SCHOOLS	CENTRAL PRIMARY	496	100.0%	63.0%	N/A	0.0%	2	yes
CARRIZOZO MUNICIPAL SCHOOLS	CARRIZOZO ELEMENTARY	45	88.0%	55.0%	N/A	12.0%	6	yes
CENTRAL CONSOLIDATED SCHOOLS	MESA ELEMENTARY	326	100.0%	65.9%	N/A	0.0%	5	yes
CENTRAL CONSOLIDATED SCHOOLS	NEWCOMB ELEMENTARY	249	100.0%	66.8%	N/A	0.0%	4	yes
CENTRAL CONSOLIDATED SCHOOLS	NIZHONI ELEMENTARY	387	100.0%	74.9%	N/A	0.0%	1	yes
CENTRAL CONSOLIDATED SCHOOLS	OJO AMARILLO ELEMENTARY	394	100.0%	71.4%	N/A	0.0%	1	yes
CENTRAL CONSOLIDATED SCHOOLS	NASCHITTI ELEMENTARY	92	96.6%	60.4%	N/A	3.4%	1	yes
CENTRAL CONSOLIDATED SCHOOLS	TSE BIT AI MIDDLE	496	95.8%	59.9%	N/A	4.2%	1	yes
CHAMA VALLEY INDEPENDENT SCHOOLS	CHAMA ELEMENTARY	102	88.9%	55.6%	N/A	11.1%	5	yes
CHAMA VALLEY INDEPENDENT SCHOOLS	ESCALANTE MIDDLE/HIGH SCHOOL	155	94.2%	78.1%	16.1%	5.8%	2	yes
CIMARRON MUNICIPAL SCHOOLS	CIMARRON ELEMENTARY	53	90.6%	88.7%	1.9%	9.4%	1	yes
CLOVIS MUNICIPAL SCHOOLS	MARSHALL MIDDLE	616	87.2%	54.5%	N/A	12.8%	8	yes
CLOVIS MUNICIPAL SCHOOLS	HIGHLAND ELEMENTARY	271	90.7%	56.7%	N/A	9.3%	5	yes
CLOVIS MUNICIPAL SCHOOLS	SANDIA ELEMENTARY	418	80.4%	50.2%	N/A	19.6%	5	yes
CLOVIS MUNICIPAL SCHOOLS	CAMEO ELEMENTARY	303	100.0%	66.2%	N/A	0.0%	3	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
CLOVIS MUNICIPAL SCHOOLS	ARTS ACADEMY AT BELLA VISTA	371	100.0%	70.2%	N/A	0.0%	2	yes
CLOVIS MUNICIPAL SCHOOLS	LA CASITA ELEMENTARY	262	90.8%	56.7%	N/A	9.2%	1	yes
COBRE CONSOLIDATED SCHOOLS DISTRICT	HURLEY ELEMENTARY	145	95.7%	59.8%	N/A	4.3%	3	yes
COBRE CONSOLIDATED SCHOOLS DISTRICT	BAYARD ELEMENTARY	247	90.0%	56.3%	N/A	10.0%	2	yes
COBRE CONSOLIDATED SCHOOLS DISTRICT	CENTRAL ELEMENTARY	268	84.1%	52.6%	N/A	15.9%	2	yes
CUBA INDEPENDENT SCHOOLS	CUBA HIGH	242	96.3%	60.2%	N/A	3.8%	3	yes
CUBA INDEPENDENT SCHOOLS	CUBA ELEMENTARY	194	100.0%	72.6%	N/A	0.0%	1	yes
DEMING PUBLIC SCHOOLS	BELL ELEMENTARY	238	100.0%	80.4%	N/A	0.0%	2	yes
DEMING PUBLIC SCHOOLS	DEMING HIGH	1338	91.1%	56.9%	N/A	8.9%	2	yes
DEMING PUBLIC SCHOOLS	MEMORIAL ELEMENTARY	411	90.7%	56.7%	N/A	9.3%	2	yes
DEMING PUBLIC SCHOOLS	DEMING CESAR CHAVEZ	158	100.0%	73.6%	N/A	0.0%	1	yes
DEMING PUBLIC SCHOOLS	MY LITTLE SCHOOL	75	100.0%	100.0%	N/A	0.0%	1	yes
DEMING PUBLIC SCHOOLS	CHAPARRAL ELEMENTARY	400	88.7%	55.4%	N/A	11.3%	1	yes
DEXTER CONSOLIDATED SCHOOLS	DEXTER MIDDLE	214	80.4%	50.2%	N/A	19.7%	3	yes
ESPANOLA PUBLIC SCHOOLS	SAN JUAN ELEMENTARY	284	82.0%	51.3%	N/A	18.0%	4	yes
ESPANOLA PUBLIC SCHOOLS	VELARDE ELEMENTARY	58	100.0%	66.7%	N/A	0.0%	2	yes
ESPANOLA PUBLIC SCHOOLS	CHIMAYO ELEMENTARY	144	89.4%	55.9%	N/A	10.6%	2	yes
ESPANOLA PUBLIC SCHOOLS	EUTIMIO SALAZAR ELEMENTARY	406	100.0%	66.9%	N/A	0.0%	1	yes
ESPANOLA PUBLIC SCHOOLS	HERNANDEZ ELEMENTARY	108	100.0%	64.8%	N/A	0.0%	1	yes
ESTANCIA MUNICIPAL SCHOOLS	UPPER ELEMENTARY	126	98.1%	61.3%	N/A	1.9%	2	yes
FARMINGTON MUNICIPAL SCHOOLS	APACHE ELEMENTARY	458	100.0%	63.0%	N/A	0.0%	6	yes
FARMINGTON MUNICIPAL SCHOOLS	BLUFFVIEW ELEMENTARY	414	94.1%	58.8%	N/A	5.9%	4	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
FARMINGTON MUNICIPAL SCHOOLS	MCCORMICK ELEMENTARY	444	100.0%	62.6%	N/A	0.0%	3	yes
FARMINGTON MUNICIPAL SCHOOLS	ANIMAS ELEMENTARY	435	100.0%	67.0%	N/A	0.0%	1	yes
GADSDEN INDEPENDENT SCHOOLS	GADSDEN HIGH	1530	80.5%	50.3%	N/A	19.5%	8	yes
GADSDEN INDEPENDENT SCHOOLS	GADSDEN MIDDLE	790	96.6%	60.4%	N/A	3.4%	3	yes
GADSDEN INDEPENDENT SCHOOLS	ANTHONY ELEMENTARY	379	100.0%	71.2%	N/A	0.0%	2	yes
GADSDEN INDEPENDENT SCHOOLS	MESQUITE ELEMENTARY	307	100.0%	62.6%	N/A	0.0%	2	yes
GADSDEN INDEPENDENT SCHOOLS	SANTA TERESA MIDDLE	645	87.0%	54.4%	N/A	13.0%	2	yes
GADSDEN INDEPENDENT SCHOOLS	CHAPARRAL ELEMENTARY	498	100.0%	68.6%	N/A	0.0%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	THOREAU ELEMENTARY	288	100.0%	72.7%	N/A	0.0%	3	yes
GALLUP MCKINLEY COUNTY SCHOOLS	JOHN F. KENNEDY MIDDLE	671	88.1%	55.1%	N/A	11.9%	2	yes
GALLUP MCKINLEY COUNTY SCHOOLS	TOHATCHI HIGH	313	87.5%	54.7%	N/A	12.5%	2	yes
GALLUP MCKINLEY COUNTY SCHOOLS	CROWNPOINT HIGH	267	85.1%	53.2%	N/A	14.9%	2	yes
GALLUP MCKINLEY COUNTY SCHOOLS	CHEE DODGE ELEMENTARY	290	100.0%	67.0%	N/A	0.0%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	DAVID SKEET ELEMENTARY	225	100.0%	70.0%	N/A	0.0%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	NAVAJO ELEMENTARY	274	100.0%	74.0%	N/A	0.0%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	ROCKY VIEW ELEMENTARY	296	100.0%	69.9%	N/A	0.0%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	THOREAU MIDDLE	245	100.0%	73.1%	N/A	0.0%	1	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
GALLUP MCKINLEY COUNTY SCHOOLS	CROWNPOINT MIDDLE	174	98.8%	61.7%	N/A	1.2%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	GALLUP CENTRAL ALTERNATIVE	217	93.8%	58.6%	N/A	6.2%	1	yes
GALLUP MCKINLEY COUNTY SCHOOLS	THOREAU HIGH	375	88.7%	55.5%	N/A	11.3%	1	yes
GRANTS CIBOLA COUNTY SCHOOLS	MOUNT TAYLOR ELEMENTARY	526	100.0%	62.7%	N/A	0.0%	2	yes
GRANTS CIBOLA COUNTY SCHOOLS	SAN RAFAEL ELEMENTARY	64	100.0%	68.5%	N/A	0.0%	2	yes
GRANTS CIBOLA COUNTY SCHOOLS	MESA VIEW ELEMENTARY	480	97.8%	61.1%	N/A	2.2%	2	yes
GRANTS CIBOLA COUNTY SCHOOLS	SEBOYETA ELEMENTARY	40	100.0%	65.3%	N/A	0.0%	1	yes
HATCH VALLEY PUBLIC SCHOOLS	HATCH VALLEY MIDDLE	285	100.0%	63.1%	N/A	0.0%	1	yes
HONDO VALLEY PUBLIC SCHOOLS	HONDO ELEMENTARY	76	100.0%	73.4%	N/A	0.0%	2	yes
JEMEZ MOUNTAIN PUBLIC SCHOOLS	GALLINA ELEMENTARY	49	85.9%	53.7%	N/A	14.1%	2	yes
LA ACADEMIA DE LORES HUERTA	LA ACADEMIA DE LORES HUERTA	127	89.9	56.2	N/A	10.1	2	yes
LA PROMESA EARLY LEARNING	LA PROMESA EARLY LEARNING	378	92.0%	57.5%	N/A	8.0%	1	yes
LAS CRUCES PUBLIC SCHOOLS	ALAMEDA ELEMENTARY	415	100.0%	68.4%	N/A	0.0%	4	yes
LAS CRUCES PUBLIC SCHOOLS	CONLEE ELEMENTARY	470	100.0%	76.0%	N/A	0.0%	4	yes
LAS CRUCES PUBLIC SCHOOLS	BOOKER T. WASHINGTON	342	100.0%	78.2%	N/A	0.0%	3	yes
LAS CRUCES PUBLIC SCHOOLS	DONA ANA ELEMENTARY	339	95.1%	59.4%	N/A	4.9%	3	yes
LAS CRUCES PUBLIC SCHOOLS	LYNN MIDDLE	707	95.0%	59.4%	N/A	5.0%	3	yes
LAS CRUCES PUBLIC SCHOOLS	HERMOSA HEIGHTS ELEMENTARY	422	100.0%	65.5%	N/A	0.0%	2	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
LAS CRUCES PUBLIC SCHOOLS	VALLEY VIEW ELEMENTARY	390	100.0%	70.7%	N/A	0.0%	2	yes
LAS CRUCES PUBLIC SCHOOLS	CENTRAL ELEMENTARY	218	100.0%	71.8%	N/A	0.0%	1	yes
LAS CRUCES PUBLIC SCHOOLS	MACARTHUR ELEMENTARY	418	100.0%	76.1%	N/A	0.0%	1	yes
LAS CRUCES PUBLIC SCHOOLS	MESILLA PARK ELEMENTARY	433	100.0%	68.0%	N/A	0.0%	1	yes
LAS CRUCES PUBLIC SCHOOLS	UNIVERSITY HILLS ELEMENTARY	394	100.0%	66.2%	N/A	0.0%	1	yes
LAS CRUCES PUBLIC SCHOOLS	PICACHO MIDDLE	769	84.8%	53.0%	N/A	15.2%	1	yes
LAS CRUCES	MESILLA VALLEY ALTERNATIVE MIDDLE SCHOOL	99	83.2%	52.0%	N/A	16.8%	1	yes
LAS CRUCES PUBLIC SCHOOLS	RIO GRANDE PREPARATORY INSTITUTE	310	80.8%	50.5%	N/A	19.2%	1	yes
LAS CRUCES PUBLIC SCHOOLS	MESILLA ELEMENTARY	296	80.2%	50.2%	N/A	19.8%	1	yes
LAS CRUCES PUBLIC SCHOOLS	JORNADA ELEMENTARY	521	80.1%	50.1%	N/A	19.9%	1	yes
LAS VEGAS CITY PUBLIC SCHOOLS	EARLY CHILDHOOD CENTER	97	100.0%	68.4%	N/A	0.0%	1	yes
LORDSBURG MUNICIPAL SCHOOLS	CENTRAL ELEMENTARY	87	100.0%	74.0%	N/A	0.0%	1	yes
LORDSBURG MUNICIPAL	RV. TRAYLOR ELEMENTARY	220	100.0%	68.9%	N/A	0.0%	1	yes
LORDSBURG MUNICIPAL	DUGAN - TARANGO MIDDLE	77	83.6%	52.2%	N/A	16.4%	1	yes
LOS LUNAS PUBLIC SCHOOLS	RAYMOND GABALDON ELEMENTARY	448	98.4%	61.5%	N/A	1.7%	4	yes
LOS LUNAS PUBLIC SCHOOLS	CENTURY ALT HIGH	165	91.1%	57.0%	N/A	8.9%	3	yes
MAXWELL MUNICIPAL SCHOOLS	MAXWELL ELEMENTARY	70	90.3%	56.5%	N/A	9.7%	2	yes
MORA INDEPENDENT SCHOOLS	MORA ELEMENTARY	177	93.0%	58.1%	NIA	7.0%	8	yes
MORA INDEPENDENT SCHOOLS	HOLMAN ELEMENTARY	31	100.0%	63.9%	NIA	0.0%	1	yes
MOUNTAINAIR PUBLIC SCHOOLS	MOUNTAINAIR JR HIGH	46	100.0%	64.0%	NIA	0.0%	5	yes
MOUNTAINAIR PUBLIC SCHOOLS	MOUNTAINAIR ELEMENTARY	96	100.0%	66.4%	NIA	0.0%	1	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
PENASCO INDEPENDENT SCHOOLS	PENASCO MIDDLE	55	100.0%	64.4%	NIA	0.0%	2	yes
PENASCO INDEPENDENT SCHOOLS	PENASCO ELEMENTARY	204	89.0%	55.6%	NIA	11.0%	2	yes
QUEMADO INDEPENDENT SCHOOLS	QUEMADO ELEMENTARY	62	87.1%	67.7%	0.194	12.9%	2	yes
QUESTA INDEPENDENT SCHOOLS	RIO COSTILLA SW LEARNING ACADEMY	27	100.0%	72.7%	NIA	0.0%	1	yes
RATON PUBLIC SCHOOLS	RATON INTERMEDIATE	310	94.3%	58.9%	NIA	5.7%	2	yes
RATON PUBLIC SCHOOLS	LONGFELLOW ELEMENTARY	230	83.6%	52.2%	NIA	16.4%	1	yes
ROSWELL INDEPENDENT SCHOOLS	PECOS ELEMENTARY	338	100.0%	70.7%	NIA	0.0%	3	yes
ROSWELL INDEPENDENT SCHOOLS	MOUNTAIN VIEW MIDDLE	515	1	58.8%	NIA	0.0%	300.0%	yes
ROSWELL INDEPENDENT SCHOOLS	MONTERREY ELEMENTARY	498	97.0%	60.6%	NIA	3.1%	2	yes
ROSWELL INDEPENDENT SCHOOLS	MESA MIDDLE	457	94.5%	59.0%	NIA	5.5%	2	yes
ROSWELL INDEPENDENT SCHOOLS	NANCY LOPEZ ELEMENTARY	292	100.0%	74.6%	NIA	0.0%	1	yes
ROSWELL INDEPENDENT SCHOOLS	SUNSET ELEMENTARY	345	100.0%	68.9%	NIA	0.0%	1	yes
ROSWELL INDEPENDENT SCHOOLS	WASHINGTON AVE ELEMENTARY	454	100.0%	64.0%	NIA	0.0%	1	yes
ROSWELL INDEPENDENT SCHOOLS	UNIVERSITY HIGH	144	86.2%	53.8%	NIA	13.9%	1	yes
ROSWELL INDEPENDENT SCHOOLS	VALLEY VIEW ELEMENTARY	579	86.0%	53.7%	NIA	14.0%	1	yes
ROSWELL INDEPENDENT SCHOOLS	EAST GRAND PLAINS ELEMENTARY	303	80.5%	50.3%	NIA	19.5%	1	yes
ROSWELL INDEPENDENT SCHOOLS	WHITE MOUNTAIN ELEMENTARY	510	84.9%	53.1%	NIA	15.1%	3	yes
SAN DIEGO RIVERSIDE SCHOOL	SAN DIEGO RIVERSIDE	91	100.0%	66.3%	NIA	0.0%	2	yes
SANTA FE PUBLIC SCHOOLS	FRANCIS X. NAVA ELEMENTARY	196	100.0%	65.2%	NIA	0.0%	1	yes
SANTA FE PUBLIC SCHOOLS	TESUQUE ELEMENTARY	104	94.3%	58.9%	NIA	5.7%	1	yes
SANTA FE PUBLIC SCHOOLS	KEARNY ELEMENTARY	444	92.8%	58.0%	NIA	7.2%	1	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
SANTA ROSA CONSOLIDATED SCHOOLS	SANTA ROSA ELEMENTARY	247	81.3%	50.8%	N/A	18.7%	2	yes
SILVER CONSOLIDATED SCHOOLS	SIXTH STREET ELEMENTARY	168	100.0%	68.0%	N/A	0.0%	2	yes
SILVER CONSOLIDATED SCHOOLS	G.W.STOUT ELEMENTARY	412	86.3%	53.9%	N/A	13.7%	1	yes
SOUTH VALLEY CHARTER HS	SOUTH VALLEY ACADEMY	623	91.2%	80.4%	10.8%	8.8%	2	yes
SPRINGER MUNICIPAL SCHOOLS	FORRESTER ELEMENTARY	27	93.9%	58.7%	N/A	6.1%	3	yes
TAOS MUNICIPAL SCHOOLS	ENOS GARCIA ELEMENTARY	502	100.0%	65.5%	N/A	0.0%	3	yes
TAOS MUNICIPAL SCHOOLS	RANCHOS DE TAOS ELEMENTARY	307	97.1%	60.7%	N/A	2.9%	3	yes
TAOS MUNICIPAL SCHOOLS	TAOS CYBER MAGNET	25	100.0%	63.2%	N/A	0.0%	1	yes
TAOS MUNICIPAL SCHOOLS	ARROYO DEL NORTE ELEMENTARY	113	82.7%	51.7%	N/A	17.3%	1	yes
TAOS MUNICIPAL SCHOOLS	TAOS MIDDLE	473	81.4%	50.9%	N/A	18.6%	1	yes
THE NEW AMERICA SCHOOL	THE NEW AMERICA SCHOOL	281	87.2%	54.5%	N/A	12.8%	2	yes
TRUTH OR CONSEQUENCES MUNICIPAL SCHOOLS	ARREY ELEMENTARY	91	100.0%	69.9%	N/A	0.0%	2	yes
TRUTH OR CONSEQUENCES MUNICIPAL SCHOOLS	T OR C ELEMENTARY	370	100.0%	65.8%	N/A	0.0%	1	yes
TUCUMCARI PUBLIC SCHOOLS	TUCUMCARI MIDDLE	220	95.9%	59.9%	N/A	4.1%	2	yes
TULAROSA MUNICIPAL SCHOOLS	TULAROSA ELEMENTARY	183	90.6%	56.6%	N/A	9.5%	1	yes
VAUGHN MUNICIPAL SCHOOLS	VAUGHN ELEMENTARY	37	100.0%	72.7%	N/A	0.0%	5	yes
WAGON MOUND PUBLIC SCHOOLS	WAGON MOUND ELEMENTARY	47	88.2%	55.1%	N/A	11.8%	5	yes
WEST LAS VEGAS PUBLIC SCHOOLS	RIO GALLINAS SCHOOL	67	100.0%	71.4%	N/A	0.0%	2	yes
WEST LAS VEGAS PUBLIC SCHOOLS	DON CECILIO MARTINEZ ELEMENTARY	170	100.0%	65.2%	N/A	0.0%	1	yes
WEST LAS VEGAS PUBLIC SCHOOLS	FAMILY PARTNERSHIP	30	100.0%	63.6%	N/A	0.0%	1	yes

District Name	School Name	Total Enrollment	Free and Reduced or CEP with 1.6 Multiplier	Free Lunch	Reduced Lunch	Paid Lunch	Number of Old Buildings	School with >80% F&R Lunch
WEST LAS VEGAS PUBLIC SCHOOLS	TONY SERNA JR. ELEMENTARY	102	100.0%	62.9%	N/A	0.0%	1	yes
WEST LAS VEGAS PUBLIC SCHOOLS	VALLEY ELEMENTARY	76	100.0%	77.6%	N/A	0.0%	1	yes
WEST LAS VEGAS PUBLIC SCHOOLS	UNION ELEMENTARY	96	82.0%	51.2%	N/A	18.1%	1	yes
ZUNI PUBLIC SCHOOLS	TWIN BUTTES HIGH	56	87.8%	54.9%	N/A	12.2%	1	yes

Appendix C: Questionnaire

School Name:	Building:
Plumbing Profile Question	Answers
1. When was the original building constructed? Were any buildings or additions added to the original facility? If so, complete a separate plumbing profile for each building, addition or wing.	
2. If built or repaired since 1986, were “lead-free” plumbing and solder used in accordance with the “lead-free” requirements of the 1986 Safe Drinking Water Act Amendments? What type of solder has been used?	
3. When were the most recent plumbing repairs made? Note the locations.	
4. Of what materials is the service connection (the pipe that carries water to the school or child care facility from the public water system’s main in the street) made? Note the locations where the service line enters the building and connects to the interior plumbing.	
5. What are the potable water pipes made of in the facility? Examples include: Lead, plastic, galvanized metal, cast iron, copper, other. Note the location of the different types of pipe, if applicable, and the direction of water flow through the building. Note the areas of the building that receive water first, and which areas receive water last.	

6. Are there tanks in the plumbing system (e.g., pressure tanks or gravity storage tanks)? Note the locations of any tanks, and any available information about the tank (e.g., manufacturer or date of installation).	
7. Was lead solder used in the plumbing system? Note the locations with lead solder.	
8. Are brass fittings, faucets or valves used in the drinking water system? (Note: Most faucets are brass on the inside.) You may want to note the locations on a map or diagram of their facilities and make extensive notes that would facilitate future analysis of lead sample results.	
9. How many of the following outlets provide water for consumption? Water coolers, water fountains with central chillers, cold water taps, ice makers, kitchen taps, or drinking fountains. Note the locations.	
10. Have you checked the brands and models of water coolers and compared them to the listing of banned water coolers in Appendix B of this document? Note the locations of any banned coolers.	
11. Do outlets that provide drinking water have accessible screens or aerators? (Standard faucets usually have aerator or screens. Many coolers and fountains also have inlet strainer screens.) If so, have the screens been cleaned? Note the locations.	

12. Are there signs of corrosion, such as frequent leaks, rust-colored water, or stained dishes or laundry? Note the locations.	
13. Is any electrical equipment grounded to water pipes? Note the locations.	
14. Have there been any complaints about bad (metallic) taste? Note the locations.	
15. Check building files and ask the public water system to determine whether any water samples have been taken from the building for any contaminants. Name of contaminant(s)? What concentrations of the contaminant(s) were found? What was the pH? Is testing done regularly at the facility?	
16. Other plumbing questions: Are blueprints of the building available? Are there known plumbing “dead-ends,” low use areas, existing leaks or other “problem areas”? Are renovations being planned for part or all of the plumbing system?	