



**HARVEST-MONROVIA WATER, SEWER AND FIRE PROTECTION  
AUTHORITY**

**PWSID# AL0000878**

**LEAD AND COPPER SAMPLING PLAN  
2019**

## **PURPOSE**

The purpose of this Monitoring Plan is to provide a guide to ADEM, Harvest-Monrovia Water, Sewer and Fire Protection Authority employees, and customers to know the criteria for selection of sampling sites to complete the required Lead and Copper Sampling.

## SYSTEM INFORMATION

System Name: Harvest-Monrovia Water, Sewer and Fire Protection Authority

PWSID Number: AL0000878

Address: P O Box 329  
Harvest, Alabama 35749

Contacts: Mike Oliver – General Manager	<a href="mailto:mikeo@hmwater.org">mikeo@hmwater.org</a>	256-837-1132
Matt Parvin – Chief Water Operator	<a href="mailto:matt@hmwater.org">matt@hmwater.org</a>	256-382-0215

System Type: Community

Population Served: 17,314 Customers Population approximately 51,912

Certified Testing Lab: Pace Analytical  
2220 Beltline Road SW  
Decatur, Alabama 35601  
Phone 256-350-0846

Secondary Lab: Pace Analytical  
3516 Greensboro Avenue  
Tuscaloosa, Alabama 35401  
Phone 205-345-0816





# Water Supply Permit

**PERMITTEE:** Harvest-Monrovia Water, Sewer & Fire Protection, Inc.

**FACILITY LOCATION:** Madison County

**PERMIT NUMBER:** 2016-503

**PWSID NUMBER:** AL0000878

**PUBLIC WATER SYSTEM:**

The Harvest-Monrovia Water, Sewer & Fire Protection, Inc serves approximately 15,692 customers and consists of:

- Sources:** The 10.0 MGD Burwell WTP is supplied by four well sources with a permitted capacity of 8,950 gpm. The 2.1 MGD Mt. Zion WTP is supplied by two well sources with a permitted capacity of 1,550 gpm. Well #2 has a permitted capacity of 110 gpm.
- Water Treatment/CT:** **Burwell WTP:** Mechanical Treatment; Mixing, Flocculation, Filtration @ 6.0 gpm/ft<sup>2</sup>. Chemical Treatment; Aluminum Sulfate, AquaMag, Sodium Hypochlorite (CT=144 @ 1.00 ppm), Fluoride. **Mt. Zion WTP:** Mechanical Treatment; Mixing, Microfiltration. Chemical Treatment; Sodium Hypochlorite (CT=80 @ 1.00 ppm), Fluoride. **Well #2 WTP:** Mechanical Treatment; None. Chemical Treatment; Sodium Hypochlorite, AquaMag.
- Clearwells:** Two baffled clearwells with a total capacity of 3,350,000 gallons: One (1) 3,000,000 gallon and one (1) 350,000 gallon clearwell.
- Storage Facilities:** Five (5) ground tanks and two (2) elevated tanks with a total volume of 11,500,000 gallons.
- Booster Pump Stations:** Three (3) pump stations.
- Distribution System:** Approximately 638 miles of water main consisting of 159 miles of cast/ductile iron water main and 479 miles of PVC water main.
- Connections to Additional Systems:** Potable water is sold to the Limestone County Water Authority. Emergency connections exist with the Madison Water Works, Madison County Water Department and Huntsville Utilities.

*In accordance with and subject to the provisions of the Alabama Safe Drinking Water Act of 1977, as amended, Code of Alabama 1975, SS22-23-30 to 22-23-53 (the "ASDWA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, SS22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the permittee is authorized to furnish and continue to furnish and supply water to human beings from the above described public water system.*

**ISSUANCE DATE:** September 10, 2015

**SPECIAL CONDITIONS APPLY**

**EFFECTIVE DATE:** October 1, 2015

**EXPIRATION DATE:** September 30, 2021

*GLENNA L. DEAN*  
Alabama Department of Environmental Management



## Lead and Copper Rule (LCR)

EPA promulgated the Lead and Copper Rule (LCR) in 1991, and ADEM adopted the rule in 1992. Implementation of this rule is a critical component of ADEM's efforts to protect public health and ensure the safety of our state's drinking water. The following information outlines how the LCR is implemented and identifies ways for the public to find information about the quality of its drinking water.

- The LCR has four basic requirements:
  1. Require water systems to optimize their treatment system to control corrosion in the distribution system and the customer's plumbing;
  2. Determine tap water levels of lead and copper for customers who have lead service lines or lead-based solder in their plumbing system;
  3. Rule out the source water as a source of significant lead levels; and
  4. If lead action levels are exceeded, the water system is required to take additional actions, which may include:
    - a. Developing and implementing a plan to optimize corrosion control in the finished drinking water;
    - b. Educating their customers about lead and suggesting actions they can take to reduce their exposure to lead through public notices and public education programs;
    - c. Replacing the portions of lead service lines under the system's control; and
    - d. Offering to replace lead service lines under their customers' control at an equitable cost to the customer.
- The LCR requires water systems to monitor at least every 3 years. Some water systems monitor more frequently. The water system selects the sites based on criteria set out in the rule. The criteria for the lead and copper sampling sites are:
  1. Tier 1 sites--These sites include single family structures containing lead pipe or plumbing, are served by a lead service line, or contain copper pipes with lead solder and were constructed after 1982.
  2. Tier 2 sites--These sites include buildings and multiple family residences containing lead pipe or plumbing, are served by a lead service line, or contain copper pipes with lead solder and were constructed after 1982.
  3. Tier 3 sites--These sites include single family structures containing copper pipes with lead solder which were constructed prior to 1983.
- The LCR prescribes a specific sampling protocol for water systems to utilize for collecting lead and copper samples at a residence or business (see below).
  1. Tap monitoring (collecting a water sample from a faucet) for lead and copper shall be the first draw and one liter in volume.
  2. The water shall stand motionless in the plumbing system for at least six hours prior to collection. Pre-stagnation flushing shall not be performed.
  3. Collection shall be from the cold water kitchen tap or bathroom sink tap from tier 1 sites or from an interior tap typically used for obtaining water for consumption from tier 2 and tier 3 sites.
  4. Aerators shall not be removed from taps or cleaned prior to or during the collection of samples.
  5. Wide-mouth bottles shall be used to collect samples to allow for a higher flow rate during sample collection which is more representative of the flow that a consumer may use to fill a glass of water.
  6. Monitoring may be conducted by the resident after proper instructions and procedures have been provided by the water system.
  7. Follow up tap monitoring shall be conducted from the same sites.
  8. Should a site no longer be available, an alternate acceptable site may be selected which is in reasonable proximity of the original site.
  9. Taps used for monitoring may not include faucets that have point of use or treatment devices installed.
- EPA published a [memo clarifying recommended tap sampling procedure for the LCR](#) on February 29, 2016, to provide recommendations on how public water systems should address the removal of cleaning aerators, pre-stagnation flushing, and bottle configuration for the purpose of the LCR.
- More information on the LCR can be found on EPA's website at: <http://www.epa.gov/dwreginfo/lead-and-copper-rule>.
- EPA's LCR Quick Reference Guide can be found at: [LCR Quick Reference Guide](#)
- EPA's [Optimal Corrosion Control Treatment Evaluation Technical Recommendations](#) webpage provides information to help primary agencies and systems comply with corrosion control treatment (CCT) requirements of the Lead and Copper Rule (LCR), including designation of Optimal Corrosion Control Treatment (OCCT).
- More information specifically about your drinking water system can be found in your water system's Annual Consumer Confidence Report (Water Quality Report) available at your water system or on its website. These reports are also submitted to ADEM, so they are available in ADEM's [eFile](#) system. You can also find information at EPA's Enforcement and Compliance History Online (ECHO) web site at: <https://echo.epa.gov/>




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

FEB 29 2016

OFFICE OF  
WATER

MEMORANDUM

SUBJECT: Clarification of Recommended Tap Sampling Procedures for Purposes of the Lead and Copper Rule

FROM: Peter C. Grevatt, Director  
Office of Ground Water & Drinking Water 

TO: Water Division Directors  
Regions I - X

The Lead and Copper Rule, 40 C.F.R. Sections 141.80 to 141.91, requires monitoring at consumer taps to identify levels of lead in drinking water that may result from corrosion of lead-bearing components in a public water system's distribution system or in household plumbing. These samples help assess the need for, or the effectiveness of, corrosion control treatment. The purpose of this memorandum is to provide recommendations on how public water systems should address the removal and cleaning of aerators, pre-stagnation flushing, and bottle configuration for the purpose of Lead and Copper Rule sampling.

Removal and Cleaning of Aerators

EPA issued a memorandum on *Management of Aerators during Collection of Tap Samples to Comply with the Lead and Copper Rule* on October 20, 2006. This memorandum stated that EPA recommends that homeowners regularly clean their aerators to remove particulate matter as a general practice, but states that public water systems should not recommend the removal or cleaning of aerators prior to or during the collection of tap samples gathered for purposes of the Lead and Copper Rule. EPA continues to recommend this approach. The removal or cleaning of aerators during collection of tap samples could mask the added contribution of lead at the tap, which may potentially lead to the public water system not taking additional actions needed to reduce exposure to lead in drinking water. EPA's recommendation about the removal and cleaning of aerators during sample collection applies only to monitoring for lead and copper conducted pursuant to 40 C.F.R. 141.86.

Pre-Stagnation Flushing

EPA is aware that some sampling instructions provided to residents include recommendations to flush the tap for a specified period of time prior to starting the minimum 6-hour stagnation time required for samples collected under the Lead and Copper Rule. This practice is called pre-stagnation flushing. Pre-stagnation flushing may potentially lower the lead levels as compared to when it is not practiced.



Flushing removes water that may have been in contact with the lead service line for extended periods, which is when lead typically leaches into drinking water. Therefore, EPA recommends that sampling instructions not contain a pre-stagnation flushing step.

#### Bottle Configuration

EPA recommends that wide-mouth bottles be used to collect Lead and Copper compliance samples. It has become apparent that wide-mouth bottles offer advantages over narrow-necked bottles because wide-mouth bottles allow for a higher flow rate during sample collection which is more representative of the flow that a consumer may use to fill up a glass of water. In addition, a higher flow rate can result in greater release of particulate and colloidal lead and therefore is more conservative in terms of identifying lead concentrations.

#### Conclusion

EPA is providing these recommendations for collection of Lead and Copper Rule tap samples to better reflect the state of knowledge about the fate and transport of lead in distribution systems. The three areas discussed above may potentially lead to samples that erroneously reflect lower levels of lead concentrations. The recommendations in this memorandum are also consistent with the recommendations provided by the EPA's Flint Task Force. For more information about the Task Force please view EPA's website at: <http://www.epa.gov/flint>.

To provide further information on this topic, EPA included an amended "Suggested Directions for Homeowner Tap Sample Collection Procedures" in Appendix D of the 2010 revision of *Lead and Copper Rule Monitoring and Reporting Guidance for Public Water Systems* (EPA 816-R-10-004). This document can be found at:

<http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100DP2P.txt>

Please share these recommendations with your state drinking water program directors. If you have any questions, please contact Anita Thompkins at [thompkins.anita@epa.gov](mailto:thompkins.anita@epa.gov).

Attachment

cc: James Taft, Association of State Drinking Water Administrators

## Lead & Copper MCLs

Contaminant	MCL in mg/l
Lead	0.015
Copper	1.3

## Lead & Copper Monitoring Sites

System Size (Population)	Initial Monitoring	Reduced Monitoring
	Sites	Sites
>100,000	100	50
<b>10,001-100,000</b>	<b>60</b>	<b>30</b>
3,301-10,000	40	20
501-3,300	20	10
101-500	10	5
<10	5	5

Sample sites for Community systems - Community water systems must collect all lead and copper samples from tier one sites or document the lack of insufficient sites and collect remaining samples from tier two sites. Water systems with insufficient tier one and two sites may utilize tier three sites.

Tier one sites – These sites include single family structures containing lead pipe or plumbing, are served by a lead service line, or contain copper pipes with lead solder and were constructed after 1982.

Tier two sites – These sites include buildings and multiple family residences containing lead pipe or plumbing, are served by a lead service line, or contain copper pipes with lead solder and were constructed after 1982.

Tier three sites – These sites include single family structures containing copper pipes with lead solder which were constructed prior to 1983.



## **Sampling Site Information**

Harvest-Monrovia Water, Sewer and Fire Protection Authority were required to take 60 samples for the original Lead and Copper sampling in 1993. The current sampling number is 30 samples on the reduced sampling sites requirements. All sites sampled for the original sampling requirements were Tier 1 sites. Tier 1 sites are currently being used for the reduced monitoring.

Appendix A: List of sample sites. All samples since 1993 have been taken from the original 60 sites. 30 samples have been taken each sampling period out of the 60 original sites.

Appendix B: Contains sample customer letters.

Appendix C: Contains instructions for the customers on how to take the samples and provide the information to the Authority.

Appendix D: Contains customer sample letter of results.

Appendix E: Contains letters and results used to report to ADEM.

**APPENDIX A**

AL0000878

## Harvest-Monrovia Water Authority Lead &amp; Copper Sample Sites

Address	Tier	Year Built
111 Erie Phillips Rd Huntsville AL 35806	1	1985
110 Richard Brown Rd Harvest AL 35749	1	1986
113 Timberland Trce Madison AL 35757	1	1987
107 Timberland Trce Madison AL 35757	1	1987
102 Ce-Lee Dr Huntsville AL 35806	1	1987
110 Ce-Lee Dr Huntsville AL 35806	1	1986
112 Hunter Brown Rd Huntsville AL 35806	1	1984
106 Northwood Cir Harvest AL 35749	1	1984
100 Scarlet Oak Cir Harvest AL 35749	1	1986
104 Scarlet Oak Cir Harvest AL 35749	1	1986
115 Northwood Cir Harvest AL 35749	1	1985
105 Ce-Lee Dr Huntsville AL 35806	1	1988
102 Scarlet Oak Cir Harvest AL 35749	1	1986
105 Northwood Cir Harvest AL 35749	1	1986
102 Jenni Leigh Dr Huntsville AL 35806	1	1987

Address	Tier	Year Built
108 Timberland Trce Madison AL 35757	1	1988
107 Richard Brown Rd Harvest AL 35749	1	1987
130 Timberland Trce Madison AL 35757	1	1986
116 Water Oak Ct Harvest AL 35749	1	1985
121 Vasser Cir Harvest AL 35749	1	1986
109 Ce-Lee Dr Huntsville AL 35806	1	1987
103 Vasser Cir Harvest AL 35749	1	1987
112 Scarlet Oak Cir Harvest AL 35749	1	1986
231 Rosecliff Dr Harvest AL 35749	1	1987
132 Water Oak Ct Harvest AL 35749	1	1985
110 Scarlet Oak Cir Harvest AL 35749	1	1987
111 Water Oak Ct Harvest AL 35749	1	1988
123 Jenni Leigh Dr Huntsville AL 35806	1	1987
116 Timberland Trce Madison AL 35757	1	1987
116 Woodfield Dr Madison AL 35757	1	1988



AL0000878

## Harvest-Monrovia Water Authority Lead &amp; Copper Sample Sites

Address	Tier	Year Built
127 Southview Dr Huntsville AL 35806	1	1985
102 Northwood Cir Harvest AL 35749	1	1985
109 Jenni Leigh Dr Huntsville AL 35806	1	1988
832 Pine Grove Rd Harvest AL 35749	1	1987
111 Ce-Lee Dr Huntsville AL 35806	1	1986
133 Timberland Trce Madison AL 35757	1	1986
269 Alt Harvest Rd Harvest AL 35749	1	1987
144 Timberland Trce Madison AL 35757	1	1987
127 Hunter Brown Rd Huntsville AL 35806	1	1984
134 Southview Dr Huntsville AL 35806	1	1985
1055 Capshaw Rd Madison AL 35757	1	1984
110 Brookville Dr Harvest AL 35749	1	1987
106 Timberland Trce Madison AL 35757	1	1986
103 Brookville Dr Harvest AL 35749	1	1987
118 Water Oak Ct Harvest AL 35749	1	1986

Address	Tier	Year Built
197 Northwood Dr Harvest AL 35749	1	1987
106 Vasser Cir Harvest AL 35749	1	1987
129 Water Oak Ct Harvest AL 35749	1	1985
111 Gibbon Dr Harvest AL 35749	1	1987
118 Timberland Trce Madison AL 35757	1	1988
133 Water Oak Ct Harvest AL 35749	1	1985
105 Richard Brown Rd Harvest AL 35749	1	1986
265 Northwood Dr Harvest AL 35749	1	1984
137 Timberland Trce Madison AL 35757	1	1987
107 Scarlet Oak Cir Harvest AL 35749	1	1986
208 Meadow Crest Dr Madison AL 35757	1	1983
147 Timberland Trce Madison AL 35757	1	1986
156 Mill Stream Dr Huntsville AL 35806	1	1983
230 Rosecliff Dr Harvest AL 35749	1	1987
423 Ita Ann Ln Madison AL 35757	1	1986

# ADEM

ALABAMA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



Leigh Pegues, Director

1751 Cong. W. L.  
Dickinson Drive  
Montgomery, AL  
36130  
(205) 271-7700  
FAX 271-7950  
270-5612

November 5, 1992

Guy Hunt  
Governor

Field Offices:

110 Vulcan Road  
Birmingham, AL  
35209  
(205) 942-6168  
FAX 941-1603

P.O. Box 953  
Decatur, AL  
35602  
(205) 353-1713  
FAX 340-9359

2204 Perimeter Road  
Mobile, AL  
36615  
(205) 450-3400  
FAX 479-2593

HARVEST-MONROVIA WATER  
ATTN: JAMES ATCHELY  
P O BOX 5  
HARVEST AL 35749

RE: Lead/Copper Monitoring

ATTN: JAMES ATCHELY:

As you are selecting lead and copper monitoring sites, please remember that Tier 1 sites should include only those homes built between 1983 and 1988, since after 1988 lead solder was banned from use in any potable water plumbing system. However, if a single family residence constructed after 1988 is sampled, verification that lead solder was used and the plumbing installation year must be provided to ADEM.

If you should have any questions, call me at 271-7776.

Sincerely,

Lillian Westry, Engineer  
Lead/Copper Compliance  
Water Supply Branch

LW/iw

**APPENDIX B**



## Harvest-Monrovia Water and Sewer Authority

Dear Customer,

We are planning to start lead and copper sampling soon. EPA and ADEM require the water system to sample for this every 3 years. We are asking for your cooperation in completing the sampling process. The Authority goes to great lengths to make sure the water you drink not only meets EPA and ADEM standards, but ours as well.

Sampling will take place in the months of June, July, August or September. **We will let you know before the bottles are delivered.** Along with sample bottle will be instructions on how to collect the water in your home. After the samples have been collected, please place the bottle on your front porch for our employee to pick up. Thank you for your help in the past and cooperation this year to complete the testing.

The results in the past have been satisfactory and we have not had any problems meeting the standards set by EPA. We do not expect any problems with the test this year. You will receive a copy of the results when the testing is complete.

EPA requires we use the same houses for each testing period. If for some reason you do not want the Authority to use your home for sampling purposes, please call the office at 256-837-1132 and ask for me.

Thank You,

Mike Oliver  
General Manager

## Harvest-Monrovia Water and Sewer Authority

*(Insert Date)*

Lead and Copper Sampling

Dear Customer,

Bottles will be delivered for the lead and copper sampling between *(Insert Date-Insert Date)*. Along with sample bottles, will be instructions on how to collect the water in your home. After the samples have been collected, please place the bottle on your front porch for our employee to pick up. If you have any questions call 256-837-1132 and someone will help you.

Thank you for your help and support in this effort. You will get the results from the sample at your residence.

Thanks,

Mike Oliver

General Manager

## APPENDIX C



## LEAD AND COPPER SAMPLING PROCEDURES

Instructions for the lead and copper sampling are attached. The Authority is required to take samples to comply with EPA regulations and your cooperation is appreciated.

1. The sample must be in the one-liter sample bottle supplied. When taking the sample, **completely fill the bottle.**
2. Please refer to the attached instructions to ensure the sample is taken properly.
3. After the supplied bottle has been filled, complete the information sheets supplied with the bottle at the time it was delivered. This information is essential to make sure we get the samples identified with the correct address.
4. Please place the sample in front of your house (**front porch please**) along with the information sheet and the Water Authority will pick the sample bottle up.

If you have questions please call (256) 837-1132 and ask for Mike Oliver.

Thanks for your cooperation!

**Suggested Directions for Homeowner Tap Sample Collection Procedures**  
*Revised Version: February 2016*

These samples are being collected to determine the lead and copper levels in your tap water. This sampling effort is required by the U.S. Environmental Protection Agency and your State under the Lead and Copper Rule, and is being accomplished through a collaboration between the public water system and their consumers (e.g. residents).

Collect samples from a tap that has not been used for at least 6 hours. To ensure the water has not been used for at least 6 hours, the best time to collect samples is either early in the morning or in the evening upon returning from work. Be sure to use a kitchen or bathroom cold water tap that has been used for drinking water consumption in the past few weeks. The collection procedure is described below.

1. Prior arrangements will be made with you, the customer, to coordinate the sample collection. Dates will be set for sample kit delivery and pick-up by water system staff.
2. There must be a minimum of 6 hours during which there is no water used from the tap where the sample will be collected and any taps adjacent or close to that tap. Either early mornings or evenings upon returning home are the best sampling times to ensure that the necessary stagnant water conditions exist. Do not intentionally flush the water line before the start of the 6 hour period.
3. Use a kitchen or bathroom cold-water faucet for sampling. If you have water softeners on your kitchen taps, collect your sample from the bathroom tap that is not attached to a water softener, or a point of use filter, if possible. Do not remove the aerator prior to sampling. Place the opened sample bottle below the faucet and open the cold water tap as you would do to fill a glass of water. Fill the sample bottle to the line marked "1000-mL" and turn off the water.
4. Tightly cap the sample bottle and place in the sample kit provided. Please review the sample kit label at this time to ensure that all information contained on the label is correct.
5. If any plumbing repairs or replacement has been done in the home since the previous sampling event, note this information on the label as provided. Also if your sample was collected from a tap with a water softener, note this as well.
6. Place the sample kit in the same location the kit was delivered to so that water system staff may pick up the sample kit.
7. Results from this monitoring effort and information about lead will be provided to you as soon as practical but no later than 30 days after the system learns of the tap monitoring results. However, if excessive lead and/or copper levels are found, immediate notification will be provided (usually 1-2 working days after the system learns of the tap monitoring results).

Call \_\_\_\_\_ at \_\_\_\_\_ if you have any questions regarding these instructions.

<b>TO BE COMPLETED BY RESIDENT</b>	
Water was last used: Time _____	Date _____
Sample was collected: Time _____	Date _____
Sample Location & faucet (e.g. Bathroom sink): _____	
I have read the above directions and have taken a tap sample in accordance with these directions.	
Signature _____	Date _____

LEAD AND COPPER SAMPLES

Name \_\_\_\_\_

Address \_\_\_\_\_

Sample Date \_\_\_\_\_ Sample Time \_\_\_\_\_

Sample Location *check one* Kitchen  Bathroom

Water Stagnation Period \_\_\_\_\_ hours

House Construction Year \_\_\_\_\_

**\*\*For Water Authority Personnel Only\*\***

Employee Picking Up Sample \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_

LEAD AND COPPER SAMPLES

Name \_\_\_\_\_

Address \_\_\_\_\_

Sample Date \_\_\_\_\_ Sample Time \_\_\_\_\_

Sample Location *check one* Kitchen  Bathroom

Water Stagnation Period \_\_\_\_\_ hours

House Construction Year \_\_\_\_\_

**\*\*For Water Authority Personnel Only\*\***

Employee Picking Up Sample \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_



**APPENDIX D**

## Harvest-Monrovia Water and Sewer Authority

August 3, 2016

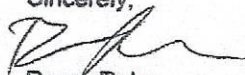
RE: Lead and Copper Sampling Results

Dear Customer,

Enclosed are the sample results from your home for the Lead and Copper Sampling requirements in 2016. As you can see from the samples the lead and copper levels are below the Maximum Contaminant Levels (MCL). The MCL for lead is 0.015 parts per million (ppm) and the copper MCL is 1.3 ppm.

If you have any questions concerning the sample results please feel free to call Roger Raby at 256-837-1132. The Authority Thanks you for your help and will be asking again in 3 years to do the same.

Sincerely,



Roger Raby  
General Manager  
Harvest-Monrovia Water

# Harvest Monrovia Water Authority

## Lead/Copper Results

2016

Sample #	Sample ID	Address	Parameter	Result	MCL	Units
1	1609268	269 Alt Harvest Road	Lead	0.001	0.015	ppm
			Copper	0.139	1.3	ppm

SAMPLE

Laboratory Information  
*Enersolv*  
P.O. Box 1646  
Decatur, Alabama 35602  
Phone: (256) 350-0846  
Fax: (256) 350-0686

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Harvest-Monrovia Water, Sewer and Fire Protection Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you want more information about lead in drinking water, testing methods and steps you can take to minimize exposure call the Safe Drinking Water Hotline or visit <http://www.epa.gov/safewater/lead>.

**Action Level (AL)**- The concentration of a contaminant which, if exceeds, triggers treatment or other requirements which a waster system must follow.

**Maximum Contaminant Level (MCL)** - Highest level of a contaminant allowed in the drinking water.

**Maximum Contaminant Level Goal (MCLG)** - Level of a contaminant in drinking water below which there are no known or expected health risks.



**APPENDIX E**

## Harvest-Monrovia Water and Sewer Authority

September 9, 2016

Laura Taylor  
ADEM- Water Supply  
P O Box 301463  
Montgomery, Alabama 36130-1463

RE: Lead and Copper Sampling 2016  
Harvest-Monrovia Water PWSID# 0878  
Madison County

Dear Laura,

Enclosed are the sample results along with the Certification Statement for 2016 Lead and Copper sampling period. Also enclosed is a copy of the Letter sent to each customer that helped with the sampling for 2016. Sampling results were attached to this letter for each Resident site.

All original sites were used to conduct the 2016 test. Enersolve performed the analysis using the laboratory EPA method 200.8 for both Lead and Copper. The results for both Lead and Copper are listed in ascending order showing the 90<sup>th</sup> percentile results.

If you have any questions please contact me at 256-837-1132.

Sincerely,

Roger Raby  
General Manager  
Harvest-Monrovia

Cc: Tom DeLoach

# Harvest Monrovia Water Authority

Summary of Lead Sample Results to show 90th Percentile

Collection Year 2016

Date of Report: 8/23/2016

Sample #	Sample ID	Address	Date	Time	Parameter	Result	MCL	Units
1	1609268		7/13/2016	7:15am	Lead	<0.001	0.015	mg/l
2	1609268		7/13/2016	7:00am	Lead	<0.001	0.015	mg/l
3	1609268		7/13/2016	12:30pm	Lead	<0.001	0.015	mg/l
4	1609268		7/19/2016	5:44am	Lead	<0.001	0.015	mg/l
5	1609268		7/13/2016	6:45am	Lead	<0.001	0.015	mg/l
6	1609268		7/13/2016	7:00am	Lead	<0.001	0.015	mg/l
9	1609268		7/13/2016	8:00am	Lead	<0.001	0.015	mg/l
10	1609268		7/13/2016	5:53am	Lead	<0.001	0.015	mg/l
11	1609268		7/13/2016	8:00am	Lead	<0.001	0.015	mg/l
13	1609268		7/19/2016	8:55am	Lead	<0.001	0.015	mg/l
14	1609268		7/13/2016	5:27am	Lead	<0.001	0.015	mg/l
15	1609268		7/20/2016	5:45am	Lead	<0.001	0.015	mg/l
16	1609268		7/14/2016	4:52am	Lead	<0.001	0.015	mg/l
17	1609268		7/13/2016	5:30am	Lead	<0.001	0.015	mg/l
18	1609268		7/19/2016	7:00am	Lead	<0.001	0.015	mg/l
19	1609268		7/13/2016	6:30am	Lead	<0.001	0.015	mg/l
22	1609268		7/13/2016	6:00am	Lead	<0.001	0.015	mg/l
24	1609268		7/18/2016	7:00pm	Lead	<0.001	0.015	mg/l
26	1610302-02		8/9/2016	11:00am	Lead	<0.001	0.015	mg/l
27	1610302-03		8/9/2016	4:30am	Lead	<0.001	0.015	mg/l
29	1610302-05		8/9/2016	6:00am	Lead	<0.001	0.015	mg/l
30	1610302-06		8/10/2016	6:25am	Lead	<0.001	0.015	mg/l
32	1610302-08		8/10/2016	10:42am	Lead	<0.001	0.015	mg/l
20	1609268		7/13/2016	7:00am	Lead	0.00101	0.015	mg/l
17	1609268		7/13/2016	Not Provided	Lead	0.00135	0.015	mg/l
21	1609268		7/13/2016	Not Provided	Lead	0.00172	0.015	mg/l
8	1609268		7/13/2016	4:00am	Lead	0.00174	0.015	mg/l
28	1610302-04		8/9/2016	6:35am	Lead	0.00189	0.015	mg/l
25	1610302-01		8/9/2016	7:52am	Lead	0.00190	0.015	mg/l
23	1609268		7/13/2016	8:00am	Lead	0.00226	0.015	mg/l
12	1609268		7/13/2016	6:15am	Lead	0.00414	0.015	mg/l
31	1610302-07		8/10/2016	6:30am	Lead	0.00770	0.015	mg/l



# Harvest Monrovia Water Authority

Summary of Copper Sample Results to show 90th Percentile

Collection Year 2016

Date of Report: 8/23/2016

Sample #	Sample ID	Address	Date	Time	Parameter	Result	MCL	Units
9	1609268		7/13/2016	8:00am	Copper	0.0124	1.3	mg/l
18	1609268		7/19/2016	7:00am	Copper	0.0171	1.3	mg/l
21	1609268		7/13/2016	Not Provided	Copper	0.0252	1.3	mg/l
22	1609268		7/13/2016	6:00am	Copper	0.0369	1.3	mg/l
23	1609268		7/13/2016	8:00am	Copper	0.0421	1.3	mg/l
27	1610302-03		8/9/2016	4:30am	Copper	0.0541	1.3	mg/l
24	1609268		7/18/2016	7:00pm	Copper	0.135	1.3	mg/l
1	1609268		7/13/2016	7:15am	Copper	0.139	1.3	mg/l
12	1609268		7/13/2016	6:15am	Copper	0.155	1.3	mg/l
17	1609268		7/13/2016	5:30am	Copper	0.157	1.3	mg/l
7	1609268		7/13/2016	Not Provided	Copper	0.171	1.3	mg/l
31	1610302-07		8/10/2016	10:30am	Copper	0.171	1.3	mg/l
3	1609268		7/13/2016	12:30pm	Copper	0.172	1.3	mg/l
14	1609268		7/13/2016	5:27am	Copper	0.183	1.3	mg/l
25	1610302-01		8/9/2016	7:52am	Copper	0.188	1.3	mg/l
13	1609268		7/19/2016	8:55am	Copper	0.189	1.3	mg/l
26	1610302-02		8/9/2016	11:00am	Copper	0.250	1.3	mg/l
15	1609268		7/20/2016	5:45am	Copper	0.253	1.3	mg/l
10	1609268		7/13/2016	5:53am	Copper	0.324	1.3	mg/l
16	1609268		7/14/2016	4:52am	Copper	0.338	1.3	mg/l
20	1609268		7/13/2016	7:00am	Copper	0.386	1.3	mg/l
5	1609268		7/13/2016	6:45am	Copper	0.471	1.3	mg/l
8	1609268		7/13/2016	4:00am	Copper	0.484	1.3	mg/l
2	1609268		7/13/2016	7:00am	Copper	0.546	1.3	mg/l
6	1609268		7/13/2016	7:00am	Copper	0.568	1.3	mg/l
32	1610302-08		8/10/2016	10:42am	Copper	0.592	1.3	mg/l
30	1610302-06		8/10/2016	6:25am	Copper	0.602	1.3	mg/l
19	1609268		7/13/2016	6:30am	Copper	0.665	1.3	mg/l
4	1609268		7/19/2016	5:44am	Copper	0.773	1.3	mg/l
29	1610302-05		8/9/2016	6:00am	Copper	0.780	1.3	mg/l
11	1609268		7/13/2016	8:00am	Copper	0.879	1.3	mg/l
28	1610302-04		8/9/2016	6:35am	Copper	0.881	1.3	mg/l