

Decatur Utilities

Lead and Copper Sampling Plan



2016

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System Information

System Name: Decatur Utilities Water Treatment Plant

Address: 1900 Market Street SE
Decatur, AL 35601

PWSID # 0001084

County: Morgan

Communities Served: City of Decatur, City of Hartselle, Northeast Morgan County Water District, Limestone County Water & Sewer Authority, Town of Trinity, West Morgan/East Lawrence Water Authority

System Personnel

| | | |
|--|-------------------------|--------------|
| General Manager – Ray Hardin | 1002 Central Parkway SW | 256-552-1472 |
| Plant Superintendent – Hagler Wiley Email: hwiley@decaturutilities.com | 1900 Market St NE | 256-552-1428 |
| Water Resources Manager – Tom Cleveland | 1002 Central Parkway SW | 256-301-4605 |
| Water Plant Operators | 1900 Market St NE | 256-552-1480 |

System Point of Contact

Hagler Wiley – Water Plant Superintendent
Email: hwiley@decaturutilities.com
Phone 256-552-1428
1900 Market Street
Decatur, AL 35601

Mailing Address

PO Box 2232
Decatur, AL 35609-2232

Primary Laboratory Performing Analysis

Laboratory TTL, Inc.
Address 3516 Greensboro Avenue
City, State, Zip Tuscaloosa, Alabama 35401
Telephone Number 205-345-0816
Fax Number 205-343-0635
E-Mail: smartin@ttlusa.com

Laboratory person(s) to be contacted

Contact Person Steve Martin, Lab Manager
Address- 3516 Greensboro Avenue
City, State, Zip Tuscaloosa, AL 35401
Telephone# 205-345-0816
E-mail: smartin@ttlusa.com

Contact Person Vicky Rickman, Client Consultant– Drinking Water
Address- 3516 Greensboro Avenue
City, State, Zip Tuscaloosa, AL 35401
Telephone# 205-343-0621
E-mail: vrickman@ttlusa.com

Alternate Laboratory Performing Sample Analysis

Laboratory- Enersolv Laboratory

Address- 2220 Beltline Rd SW

City, State, Zip Decatur, AL 35601

Telephone Number 256-350-0846

Fax Number 256-350-0686

E-Mail: bhollerman@enersolv.com

Contact Person- Bill Hollerman, Vice President, Technical Services

Address- 2220 Beltline Rd SW

Telephone Number 256-350-0846

Fax Number 256-350-0686

E-Mail: bhollerman@enersolv.com

Contact Person- Donnie Lane, President

Address- 2220 Beltline Rd SW

Telephone Number 256-350-0846

Fax Number 256-350-0686

E-Mail: dlane@enersolv.com

Summary Distribution System Inventory

Water Mains: Cast iron water main pipes dating to 1956 could possibly have lead and oakum joints. Drinking water would not come in contact with this type of joint.

Water Services: There are no known lead service lines in the Decatur Utilities distribution system. Some lead goosenecks have been observed in the service area bound by 12th Avenue NW, 6th Avenue NE and Moulton Street. It is the practice at Decatur Utilities to entirely replace the gooseneck services when they are found.

Metered Service Points: There are approximately 27,000 metered service points in the system. It is estimated that 95 percent of these points are copper, although most new service lines are HPDE. Other materials used in the distribution system include galvanized, cast iron, ductile iron and PVC. A complete narrative of the distribution system can be found in Appendix G.

Spare parts and equipment in our inventory supply are “lead-free’ certified; i.e., all products meet a weighted average lead content of $\leq 0.25\%$ with respect to the wetted surfaces, meeting the requirements of the *2014 Reduction of Lead in Drinking Water Act*.

Lead & Copper Rule

Appendix A.-EPA Lead and Copper Rule: A quick Reference Guide

Population Served

Population Served = 25,452 Meters x 3

Population Served = ~76,375

Source Water

Decatur Utilities obtains 100% of our water from the Wheeler Reservoir on the Tennessee River.

Corrosion Control

Decatur Utilities utilizes Carus 8100 for corrosion control. Carus 8100 is a poly/orthophosphate blend that will sequester the total hardness factor, iron and manganese content in the water, and inhibit corrosion by forming a microscopic film on the inside surface of the distribution piping throughout the system. Decatur Utilities utilizes monitoring of corrosion coupons to

determine the appropriate dose of corrosion inhibitor. Documentation from Carus can be found in Appendix D.

Sample Site Selection

Public Water Supply Lead and Copper Sample Site Plan Selection Criteria for Community Systems

All public water supplies must complete a materials evaluation of their system to identify their pool of sample sites. Samples must be collected from Tier 1 sites unless there are not sufficient sites, then Tier 2 sites may be used. If there are not sufficient Tier 1 and 2 sites then Tier 3 sites may be used.

Tier definitions are as follows:

- Tier 1 – includes single family structures that;
 - Contain copper pipes with lead solder which was installed after 1982 or;
 - Contain lead pipes or;
 - Is served by a lead service line
- Tier 2 – includes multi-family structures and buildings that;
 - Contain copper pipes with lead solder which was installed after 1982 or;
 - Contain lead pipes or;
 - Is served by a lead service line
- Tier 3 - includes single family structures that contain copper pipes with lead solder which were installed prior to 1983

Tier Categories - Use the following to identify the Tier and category of each site:

Tier 1

- Single family – copper pipe with lead solder constructed after 1982
- Single family – lead pipes
- Single family – lead service
- Multi-family – copper pipe with lead solder constructed after 1982
- Multi-family – lead pipes
- Multi-family – lead service

Tier 2

- Building – copper pipe with lead solder constructed after 1982
- Building – lead pipes
- Building – lead service

Tier 3

- Single family – copper pipe with lead solder constructed before 1983

If not enough Tier 1, 2 or 3 sites are available, random sites may be chosen.

- Random location

Number of Samples Required

As part of Lead & Copper rule, Alabama Department of Environmental Management (ADEM) administrative code 335-7-11, Decatur Utilities was initially required to collect 60 samples. On March 3, 1993, Decatur Utilities received approval from ADEM for reduce Lead & Copper monitoring thereby reducing required number of sampling sites from 60 to 30 sites according to 335-7-11.05 and table 11-1 below.

| Population | Initial Monitoring Sites | Reduced Monitoring Sites |
|-------------------|---------------------------------|---------------------------------|
| > 100,000 | 100 | 50 |
| 10,001-100,000 | 60 | 30 |
| 3,301-10,000 | 40 | 20 |
| 501-3,300 | 20 | 10 |
| 101-500 | 10 | 5 |
| < 100 | 5 | 5 |

Reduced Monitoring Site Selection

Reduced sampling sites shall be selected using the following procedure:

1. From the two most recent six-month rounds of testing, select the round of testing that had the OVERALL HIGHEST lead result.
2. Using the selected round, arrange the sampling sites in order, based on the lead test result, from highest to lowest.
3. Beginning with and including the site with the highest lead result, select and include every other site for reduced monitoring (i.e. highest result, 3rd highest, 5th highest, 7th highest, etc.).
4. After selecting every other site (see #3 above), if it is determined that a specific selected site can no longer be included in the sampling pool, replace the site with the next site on the original list (i.e. replace the 7th highest site with the 6th highest site).
5. This reduced sampling plan must be kept in your file for future reference. You must return to these same sites for each reduced sampling period.

If either the lead or copper action level IS EXCEEDED at the 90th percentile during any reduced monitoring period, you are required to conduct water quality parameter monitoring in

accordance with ADEM Admin. Code r. 335-7-11-.11 during the monitoring period in which the action level was exceeded, and resume standard or base monitoring for at least two consecutive six-month monitoring periods.

Lead and Copper Sample Sites

| Lead & Copper Sample Sites | | | | | | | |
|----------------------------|---------------------|-------------------------|----------|------|-------------------------------|-------------------------|----------------------|
| Sample ID | Resident | Address | Phone # | Tier | Lead Service Line (Yes/No) | Year of Construction | Type of Construction |
| 1 | Marsha Kimbrell | 1714 Saginaw SW | 353-9151 | 1 | No | 1983 | Residential |
| 2 | Amy Franklin | 2149 Westmeade SW | 350-2388 | 1 | No | 1982 | Residential |
| 3 | Henry Denson | 2239 Westmeade SW | 350-6171 | 1 | No | 1985 | Residential |
| 4 | Kenneth Page | 2262 Westmeade SW | 773-1640 | 1 | No | 1985 | Residential |
| 5 | Steven McClesky | 2264 Westmeade SW | 350-4625 | 1 | No | 1985 | Residential |
| 6 | Mary Hum | 2206 Essex Ave SW | 351-0164 | 1 | No | 1985 | Residential |
| 7 | Andrew Davis | 2224 Essex Dr. SW | 353-8354 | 1 | No | 1985 | Residential |
| 8 | Hugh Bohlin | 2149 Westbury Ct. SW | 350-9846 | 1 | No | 1985 | Residential |
| 9 | Sharen Newsom | 2169 Westbury Ct. SW | 214-1038 | 1 | No | 1985 | Residential |
| 10 | Casandra Noland | 2170 Westbury Ct. SW | 355-6716 | 1 | No | 1985 | Residential |
| 11 | Vacant | 2183 Westbury Ct. SW | 355-0903 | 1 | No | 1983 | Residential |
| 12 | Dorothy Cox | 2213 Brighton St. SW | 355-8493 | 1 | No | 1983 | Residential |
| 13 | Timothy Prance | 2001 Lancaster SW | 350-4908 | 1 | No | 1985 | Residential |
| 14 | Jennifer Cox | 2400 Oxmoor Ln. SW | 227-0167 | 1 | No | 1984 | Residential |
| 15 | Amy Fischer | 2203 Anderson SW | 355-4514 | 1 | No | 1985 | Residential |
| 16 | James Marble | 2212 Anderson SW | 355-0570 | 1 | No | 1984 | Residential |
| 17 | Rick James | 2106 Duncansby Dr. SW | 355-8367 | 1 | No | 1985 | Residential |
| 18 | Lori Fogg | 2107 Duncansby Dr. SW | 350-2524 | 1 | No | 1985 | Residential |
| 19 | Kennith Clemons | 2208 Duncansby Dr. SW | 341-0257 | 1 | No | 1985 | Residential |
| 20 | William Ackerman | 2204 Galahad Dr. SW | 350-3002 | 1 | No | 1985 | Residential |
| 21 | Detra Nicholson | 2205 Galahad Dr. SW | 340-1534 | 1 | No | 1985 | Residential |
| 22 | Tresa Tapscott | 2106 Galahad Dr. SW | 306-0508 | 1 | No | 1985 | Residential |
| 23 | Troy Butler | 2102 Galahad Dr. SW | 355-7986 | 1 | No | 1983 | Residential |
| 24 | William Donley | 2111 Lancelot SW | 309-0353 | 1 | No | 1985 | Residential |
| 25 | Jerry Parker | 2206 Inverness SW | 350-0388 | 1 | No | 1985 | Residential |
| 26 | Jose Maoral | 1304 Clearview SW | | 1 | No | 1984 | Residential |
| 27 | ABC Property Manage | 524 Tammy St. SW | 751-3318 | 1 | No | 1985 | Residential |
| 28 | Gregory Evans | 1820 Fitzgerald Dr. SW | 353-1200 | 1 | No | 1983 | Residential |
| 29 | Kellie Terry | 2721 Longfellow Dr. SW | 350-1634 | 1 | No | 1984 | Residential |
| 30 | Vickie Strong | 1116 Way Thru The Woods | 355-4437 | 1 | No | 1985 | Residential |

| Alternate Lead & Copper Sample Sites | | | | | | | |
|--------------------------------------|-----------------|-----------------------------|----------|------|-------------------------------|-------------------------|----------------------|
| Sample ID | Resident | Address | Phone # | Tier | Lead Service Line (Yes/No) | Year of Construction | Type of Construction |
| 31 | Stanley Ptak | 1125 Way Thru The Woods | 350-6965 | 1 | No | 1985 | Residential |
| 32 | Joan Hundson | 1144 Way Thru The Woods | 353-9427 | 1 | No | 1985 | Residential |
| 33 | Marzelle Havard | 3200 Leafwood Place | 353-5776 | 1 | No | 1985 | Residential |
| 34 | Andrea Stewart | 1201 Brandywine SE | 355-4281 | 1 | No | 1985 | Residential |
| 35 | Ralph Edwards | 1208 Brandywine SE | 351-1720 | 1 | No | 1985 | Residential |
| 36 | CL Claborn | 1259 Brandywine SE | 353-6988 | 1 | No | 1985 | Residential |
| 37 | Steven Crowell | 2406 Huntington SE | 340-0384 | 1 | No | 1985 | Residential |
| 38 | Abel Mayo | 2802 Hunterwood SE | 351-1188 | 1 | No | 1985 | Residential |
| 39 | Danny Mardis | 2006 Cotaco Valley Trail SE | 350-6711 | 1 | No | 1985 | Residential |
| 40 | Thurman Vest | 1122 11th Av. SE | 350-5209 | 1 | No | 1985 | Residential |

Making Changes to Sampling Site Locations

Make an assessment of your ability to sample a sufficient number of appropriate sites from your lead and copper plan well in advance of the monitoring period. Making contact with the resident early and determining whether their home still meets the selection criteria as a sample location will eliminate this variable. Furthermore, lead and copper samples should be collected early in the monitoring period to ensure samples arrive at the lab in a timely fashion and are analyzed well before the end of the monitoring period.

Changes to sampling sites are allowed when water systems can no longer gain access to the site or if the original site location no longer meets the Tier selection criteria. For example, if a home is vacant or demolished, if a softener is added or plumbing upgrades have been made - the structure no longer meets the Tier criteria.

Changes in locations must be submitted to the Department prior to sampling. Your lead and copper plan must be updated whenever there is an addition or deletion of a site and you are also encouraged to update the plan to identify sites that meet the requirements of proper sampling locations that can be readily substituted if needed during future monitoring events.

Calculating the 90th Percentile

If you collect 6 or more samples, calculate your 90th percentile as follows:

- Rank your samples in order of concentration (mg/L) from lowest to highest.
- Take the total number of samples collected and multiply by 0.90. The result will tell you which sample to record.
- If the number is not a whole number, round to the nearest whole number.
 - 12.7 would be rounded to 13.0 – 12.2 would be rounded to 12.0
- If the number is exactly in the middle of two whole numbers, round to the nearest even number.
 - 12.5 would be rounded to 12.0 – 13.5 would be rounded to 14.0

EXAMPLE IF YOU COLLECTED 10 SAMPLES

$$10 \times 0.9 = 9$$

Sample #9 is the 90th percentile and should be recorded on Form 141A

| Sample Site # | Sample Results |
|---------------|----------------|
| 1 | 0.001 |
| 2 | 0.001 |
| 3 | 0.001 |
| 4 | 0.001 |
| 5 | 0.001 |
| 6 | 0.004 |
| 7 | 0.005 |
| 8 | 0.006 |
| 9 | 0.008 |
| 10 | 0.010 |

The 90th percentile is 0.008 mg/l and should be recorded on Form 141A.

Please note these are examples only, you will have to insert your own results to determine your 90th percentile.

Sampling Frequency

Decatur Utilities, currently on reduced monitoring, is required to collect lead & copper samples every (3) three years. Samples must be collected during the months of June, July, August, or September.

Sampling Protocol

Start planning early to allow plenty of time to accomplish lead & copper monitoring, analysis, and reporting. Residential samples shall be collected by the consumers residing at the addresses (sample sites) specified in the lead and copper Monitoring Plan.

- Make contact with the sample site residents prior to sampling months to determine whether their home still meets proper selection criteria.
- Make arrangements with the customer for delivery and pick up of the sample bottle and instructions.
- Instruct residents to collect Lead and Copper samples early in the monitoring period to ensure samples will arrive at the lab in a timely fashion and are analyzed well before the end of the monitoring period.
- Provide each of the residences to be sampled with a zip lock plastic bag containing a one liter bottle and a copy of the *Customer Instructions for Proper Sample Collection*. This

Customer Instruction sheet is filed in the possession of the PWS. Do not send the sheet to the lab. A copy of this form can be found in Appendix F.

- With a permanent marker such as a Sharpie, write the PWS name and sample site ID on the bottle. Write the corresponding Sample Site ID number in the top right corner on each Customer Instructions sheet.
- Instruct the consumers to call the water system with any questions.

On the date pre-arranged with the customers, pick up the sample from the residence. Review the customer sheet and sample bottle to ensure all appropriate signed information is obtained and the sample is the required amount (1 Litre). If a sample is not ready, leave a reminder note of your next scheduled pickup date. Continue this process until all samples are obtained.

Use a pen (*PLEASE PRINT LEGIBLY*) to fill in the Chain of Custody (COC) completely and properly. (See completed COC example on the back of this sheet.) “Relinquished By” is signed with date and time by you when you relinquish the samples to the Lab. “Received By” is signed with date and time by personnel at the lab upon receipt of the samples. The lines for sample relinquishment shall be signed *each time* the samples are transferred to another person.

Return **ONLY** the *Chain of Custody* with the samples. Keep your Pb/Cu sample site list, the *Lead and Copper Sample Collection Procedures for Water Systems*, the signed customer instruction sheet, and the pink copy of the *Chain of Custody* for your records. Put any extra containers back in the cooler or box before shipping to the Lab. This will help to fill space and prevent damage to your water samples during shipment.

Store the samples in a cool, dark area until they are transported to the lab. Use zip-lock bags to keep things dry. Ice is not necessary. Lead and Copper samples have a 14 day holding time.

CAUTION

The PWS is ultimately responsible for the LAC sample result. Improper sampling by a resident may not be grounds for invalidation of a sample result by the ADEM. The PWS will provide clear instructions to the residents and thoroughly review the information and comments provided on the sample sheet prior to submitting the sample to the laboratory.

Notifying Sample Sites of Results

Decatur Utilities will provide each customer with the results of any lead and copper monitoring conducted at the customer's tap. These results shall be provided to the customers within 30 days of receipt of the results by the Decatur Utilities. Included with these results will be an explanation of the health effects of lead, steps consumer can take to reduce exposure to lead. An example of the information provided to customers is provided in Appendix C.

Action Level Exceedance Follow-up

If either the lead or copper action level IS EXCEEDED at the 90th percentile during any reduced monitoring period, you are required to conduct water quality parameter monitoring in accordance with ADEM Admin. Code r. 335-7-11-.11 during the monitoring period in which the action level was exceeded, and resume standard or base monitoring for at least two consecutive six-month monitoring periods. The increase monitoring shall take place (January-June) and (July-December) until compliance is achieved in two consecutive six month periods. A sample monitoring violation notice can be found in Appendix B

Public Notification Procedures

Notify the public in accordance with ADEM Rule 335-7-11.17. Public Education Requirement

The Public Education Requirement includes but is not limited to:

1. Notifying all customers within 60 days of the end of the monitoring period.
2. Contacting public health agencies, consumers who are most at risk, local family clinics, licensed daycares and schools.
3. Posting information at public areas.
4. Each quarter the exceedance occurs Decatur Utilities will provide notification through customer water bills.

A sample of the Required Public Education Material can be found in Appendix E.

Additional Monitoring

Increase lead & copper monitoring consistent with the initial compliance requirements (60 samples.) The increase monitoring shall take place during six month compliance cycles (January-June and July-December) increased monitoring shall continue until compliance is achieved for two consecutive six month cycles.

Source Water Testing

If Decatur Utilities has an exceedance for Lead or Copper compliance limit, Decatur Utilities will analyze the treated water for the contaminant using the same methodology and location as required for inorganic contaminants in the source used by the system. This analysis must be completed within 180 days after the exceedance. Should these levels exceed 0.015 mg/L lead or 1 mg/L copper, confirmation monitoring must be collected within 7 days. The value of the initial and all confirmation monitoring will be averaged. Treatment modifications must be installed which will result in the finished water meeting the drinking water standard. Prior to reactivation of this source, monitoring of the treated water shall demonstrate compliance with drinking water standards and a second set of lead and copper monitoring conducted in six months. All initial sites for lead and copper shall be monitored for the next two six-month compliance periods. Modifications to the treatment process must be approved and permitted by ADEM.

Corrosion Control Program

Decatur Utilities utilizes Carus 8100 for corrosion control, as mentioned above. In the event of a lead or copper exceedance monitoring of the corrosion control parameters will be required. ADEM may require modification to existing techniques or request that a corrosion control study be performed. If required, a new study would evaluate: alkalinity, calcium, hardness, phosphate or silica based inhibitors as well as the performance of corrosion coupons.

Decatur Utilities can demonstrate compliance by properly adjusting the treatment process and conducting a second set of monitoring within 30 days.

Appendix A

Lead and Copper Rule: A Quick Reference Guide



| Overview of the Rule | |
|----------------------|---|
| Title ¹ | Lead and Copper Rule (LCR) ² , 56 FR 26480 - 26564, June 7, 1991 |
| Purpose | Protect public health by minimizing lead (Pb) and copper (Cu) levels in drinking water, primarily by reducing water corrosivity. Pb and Cu enter drinking water mainly from corrosion of Pb and Cu containing plumbing materials. |
| General Description | Establishes action level (AL) of 0.015 mg/L for Pb and 1.3 mg/L for Cu based on 90 th percentile level of tap water samples. An AL exceedance is not a violation but can trigger other requirements that include water quality parameter (WQP) monitoring, corrosion control treatment (CCT), source water monitoring/treatment, public education, and lead service line replacement (LSLR). |
| Utilities Covered | All community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) are subject to the LCR requirements. |

| Public Health Benefits | |
|---|---|
| Implementation of the LCR has resulted in | <ul style="list-style-type: none"> Reduction in risk of exposure to Pb that can cause damage to brain, red blood cells, and kidneys, especially for young children and pregnant women. Reduction in risk of exposure to Cu that can cause stomach and intestinal distress, liver or kidney damage, and complications of Wilson's disease in genetically predisposed people. |

| Major Monitoring Provisions | |
|-----------------------------|---|
| Lead and Copper Tap | |
| Applicability | ► All CWSs and NTNCWSs. |
| Standard | <ul style="list-style-type: none"> CWSs and NTNCWSs must collect first-draw samples at taps in homes/buildings that are at high risk of Pb/Cu contamination as identified in 40 CFR 141.86(a). Number of samples is based on system size (see Table 1). Systems must conduct monitoring every 6 months unless they qualify for reduced monitoring. |
| Reduced | ► See Table 1 for sample number and Table 2 for criteria. |

| Water Quality Parameter (WQP) | |
|-------------------------------|--|
| Applicability | <ul style="list-style-type: none"> Systems serving > 50,000 people. Systems serving ≤ 50,000 during monitoring periods in which either AL is exceeded. |
| Standard | <ul style="list-style-type: none"> WQP samples at taps are collected every 6 months. WQPs at entry points to distribution system (EPTDS) are collected every 6 months prior to CCT installation, then every 2 weeks. |
| Reduced | ► See Table 1 for sample number and page 2 for criteria. Does not apply to EPTDS WQP monitoring. |

Table 1: Lead and Copper Tap and WQP Tap Monitoring

| Size Category | System Size | Number of Pb/Cu Tap Sample Sites ³ | | Number of WQP Tap Sample Sites ⁴ | |
|---------------|---------------|---|---------|---|---------|
| | | Standard | Reduced | Standard | Reduced |
| Large | > 100K | 100 | 50 | 25 | 10 |
| | 50,001 - 100K | 60 | 30 | 10 | 7 |
| Medium | 10,001 - 50K | 60 | 30 | 10 | 7 |
| | 3,301 - 10K | 40 | 20 | 3 | 3 |
| Small | 501 - 3,300 | 20 | 10 | 2 | 2 |
| | 101 - 500 | 10 | 5 | 1 | 1 |
| | ≤ 100 | 5 | 5 | 1 | 1 |

³ With written State approval, PWSs can collect < 5 samples if all taps used for human consumption are sampled.

⁴ Two WQP tap samples are collected at each sampling site.

Table 2: Criteria for Reduced Pb/Cu Tap Monitoring

| | |
|---------------|--|
| Annual | <ol style="list-style-type: none"> PWS serves ≤ 50,000 people and is ≤ both ALs for 2 consecutive 6-month monitoring periods; or Any PWS that meets optimal WQPs (OWQPs) and is ≤ Pb AL for 2 consecutive 6-month monitoring periods. |
| Triennial | <ol style="list-style-type: none"> PWS serves ≤ 50,000 people and is ≤ both ALs for 3 consecutive years of monitoring; or Any PWS that meets OWQP specifications and is ≤ Pb AL for 3 consecutive years of monitoring; or Any PWS with 90th percentile Pb and Cu levels ≤ 0.005 mg/L and ≤ 0.65 mg/L, respectively, for 2 consecutive 6-month monitoring periods (i.e., accelerated reduced Pb/Cu tap monitoring). |
| Every 9 years | PWS serves ≤ 3,300 people and meets monitoring waiver criteria found at 40 CFR 141.86(g). |

Lead Consumer Notice

Within 30 days of learning the results, all systems must provide individual Pb tap results to people who receive water from sites that were sampled, regardless of whether the results exceed the Pb AL, as required by 40 CFR 141.85(d).

Consumer Confidence Report (CCR)

All CWSs, irrespective of their lead levels, must provide an educational statement about lead in drinking water in their CCRs as required by 40 CFR 141.154. Must be in 2008 CCR (due July 1, 2009) if EPA is Primary Agency, State adopts the rule by reference automatically, or adopts during 2008. Otherwise, this statement is required in the 2009 CCR (due July 1, 2010).

¹ This document provides a summary of federal drinking water requirements; to ensure full compliance, please consult the federal regulations at 40 CFR 141 and any approved state requirements.

² The June 1991 LCR was revised with the following Technical Amendments: 56 FR 32112, July 15, 1991; 57 FR 26785, June 29, 1992; 59 FR 33860, June 30, 1994.

It was subsequently revised by: the LCR Minor Revisions, 65 FR 1950, January 12, 2000; and the LCR Short-Term Revisions, 72 FR 57782, October 10, 2007.



For additional information on the LCR

Call the Safe Drinking Water Hotline at 1-800-426-4791; visit the EPA Web site at <http://water.epa.gov/drink>; or contact your State drinking water representative.

| Treatment Technique and Sampling Requirements if the AL is Exceeded ⁵ | |
|---|--|
| ⁵ Based on 90 th percentile level. Multiply number of valid samples by 0.9 (e.g., 10 samples x 0.9 = 9; thus, use 9 th highest Pb and Cu test result to compare to AL). For 5 samples, average 4 th and 5 th highest results. For < 5 samples, use highest result. | |
| Water Quality Parameter (WQP) | |
| Applicability | Refer to page 1. |
| Parameters | ▶ pH, alkalinity, calcium (initial only, unless calcium carbonate stabilization is used), conductivity (initial monitoring only), orthophosphate (if inhibitor is phosphate-based); silica (if inhibitor is silicate-based), and temperature (initial monitoring only). |
| Frequency | ▶ Systems installing CCT, must conduct follow-up monitoring for 2 consecutive 6-month periods. ▶ WQP tap monitoring is conducted every 6 months, EPTDS monitoring increases to every 2 weeks. ▶ After follow-up monitoring, State sets OWQP specifications that define optimal CCT. |
| Reduced Tap Monitoring | ▶ Collect reduced number of sampling sites (see Table 1) if meet OWQPs for 2 consecutive 6-month periods. ▶ Collect reduced number of sampling sites at reduced frequency if meet OWQPs for: - 6 consecutive 6-month monitoring periods can monitor annually; - 3 consecutive years of annual monitoring can monitor triennially. |
| Public Education (PE) | |
| Applicability | ▶ Systems that exceed the Pb AL (not required if only the Cu AL is exceeded). |
| Purpose | ▶ Educates consumers about lead health effects, sources, and steps to minimize exposure. |
| Delivery Method | ▶ CWSs: deliver materials to bill-paying customers and post lead information on water bills, work in concert with local health agencies to reach at-risk populations (children, pregnant woman), deliver to other organizations serving "at-risk" populations, provide press releases, include new outreach activities from list in 40 CFR 141.85(a)(2)(vi), and post to Web site (CWSs serving > 100,000 only). ▶ NTNCWSs: posting and distribution to all consumers (can be electronic with State permission). Can apply to CWSs such as hospitals and prisons where population cannot make improvements. |
| Timing | ▶ Within 60 days after end of monitoring period in which Pb AL was exceeded if not already delivering PE. ⁶ ▶ Repeat annually except: water bill inserts - quarterly; press releases - 2x/year, and Web posting - continuous. ▶ Can discontinue whenever ≤ Pb AL but must recommence if subsequently exceed Pb AL. |
| ⁶ State may allow extension in some situations. Also, State may require approval of message content prior to delivery. | |
| Source Water Monitoring and Source Water Treatment (SOWT) | |
| Applicability | ▶ Systems that exceed Pb or Cu AL. |
| Purpose | ▶ Determine contribution from source water to total tap water Pb and Cu levels and need for SOWT. |
| Timing | ▶ One set of samples at each EPTDS is due within 6 months of first AL exceedance. ▶ System has 24 months to install any required SOWT. ▶ State sets maximum permissible levels (MPLs) for Pb and Cu in source water based on initial and follow-up source water monitoring. |
| Standard | ▶ Ground water PWSs monitor once during 3-year compliance periods; surface water PWSs monitor annually. |
| Reduced | ▶ Monitor every 9 years if MPLs are not exceeded during 3 consecutive compliance periods for ground water PWSs or 3 consecutive years for surface water PWSs. |
| Corrosion Control Treatment (CCT) | |
| Applicability | ▶ All large systems except those meeting requirements of 40 CFR 141.81(b)(2) or (b)(3). ▶ Medium and small systems that exceed either AL; may stop CCT steps if ≤ both ALs for 2 consecutive 6-month periods but must recommence CCT if subsequently exceed either AL. |
| Study | ▶ All large systems except as noted above. ▶ If State requires study for small or medium systems, it must be completed within 18 months. |
| Treatment | ▶ Once State determines type of CCT to be installed, PWS has 24 months to install. ▶ Systems installing CCT must conduct 2 consecutive 6 months of follow-up tap and WQP monitoring. |
| OWQPs | ▶ After follow-up Pb/Cu tap and WQP monitoring, State sets OWQPs. Refer to WQP section above. |
| Lead Service Line Replacement (LSLR) | |
| Applicability | ▶ Systems that continue to exceed the Pb AL after installing CCT and/or SOWT. ▶ Can discontinue LSLR whenever ≤ Pb AL in tap samples for 2 consecutive 6-month monitoring periods; must recommence if subsequently exceed. |
| Monitoring | ▶ Optional: Sample from LSL to determine if line must be replaced. If all samples are ≤ 0.015 mg/L, line is considered "replaced through testing"; must reconsider these lines if Pb AL is subsequently exceeded. ▶ Required: Sample from any LSLs not completely replaced to determine impact on Pb levels. |
| Replacement | ▶ Must replace at least 7% of LSLs annually; State can require accelerated schedule. ▶ If only portion of LSL is replaced, PWS must: - Notify customers at least 45 days prior to replacement about potential for increased Pb levels. - Collect samples within 72 hours of replacement and provide results within 3 days of receipt. |

Appendix B

SAMPLE PUBLIC NOTIFICATIONS

Sample Monitoring Violation Notice

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period], we “did not monitor or test” or “did not complete all monitoring or testing” for [contaminate(s)] and therefore can not be sure of the quality of your drinking water during that time.

Sample Lead Consumer Notice

In the event that Decatur Utilities detected high levels of lead in the drinking water, the following SAMPLE Lead Customer Notice would be issued to customers:

DECATUR UTILITIES found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call DECATUR UTILITIES or visit www.decaturutilities.com.

Appendix C

Sample Customer Letter

July 22, 2015

Name
Address
City, State Zip

Re: Lead and Copper Water Sample Test Results

Dear Name:

Thank you for participating in Decatur Utilities' lead and copper water sampling program that was conducted on June 15th and 16th, 2015. The results of the testing at your residence verify that no lead was detected and that the copper level, if detected, was significantly below the Action Level established by the Environmental Protection Agency (EPA). The results of the testing from your residence (highlighted in yellow) are detailed in the chart below:

| Contaminant | Action Level | Units of Measurement | Results | 90 th Percentile | Compliance Violation? |
|-------------|--------------|----------------------|---------|-----------------------------|-----------------------|
| Lead | 0.015 | mg/l | ND | ND | No |
| Copper | 1.3 | mg/l | ND | 0.387 | No |

ND=None Detected

Under the authority of the Safe Drinking Water Act, the EPA has set the Action Level (AL) for lead in drinking water at 0.015 mg/l (milligrams per liter) and for Copper at 1.3 mg/l. The AL is the concentration of a contaminant which, if exceeded, triggers additional treatment or other requirements which a water system must follow.

Utilities must ensure that water from the customer's tap does not exceed the AL for lead in at least 90 percent of the homes sampled (90th percentile value). Because lead may pose serious health risks, the EPA has also set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. Even though no lead was detected in your water sample, please review the attached fact sheet and take steps detailed to reduce your exposure to lead in drinking water.

Please contact me at (256) 552-1428 or hwiley@decaturutilities.com with any questions or comments.

Sincerely,

DECATUR UTILITIES

Hagler Wiley
Water Treatment Plant Superintendent

Enclosures

Fact Sheet: LEAD IN DRINKING WATER

Important Information on How to Protect Your Health

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery and drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells or springs.

What Are The Health Effects of Lead?

When people come in contact with lead, it may enter their bodies and accumulate over time, resulting in damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. The greatest risk of lead exposure is to infants, young children and pregnant women. Lead in water can be a special problem for infants, whose diets may be mostly liquids, such as baby formulas or concentrated juices mixed with water. Smaller bodies can absorb lead more rapidly than bigger ones, so amounts of lead that won't hurt an adult can be very harmful to a child. Scientists have linked the effects of lead on the brain with lowered IQ in children. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. Adults who drink water contaminated with lead over many years could develop kidney problems or high blood pressure.

What Are The Sources of Lead?

The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. 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. If you are concerned about lead exposure, parents should ask their health care providers about testing children for high levels of lead in the blood.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

Lead may work its way into drinking water after the water has entered the distribution system and is on its way to consumer's taps. This usually happens through the corrosion of materials containing lead in household plumbing. These materials include brass faucets, lead solder on copper pipes, lead pipes, or lead service lines connecting the water main to the inside plumbing. Lead pipes are no longer installed for service lines or in household plumbing. Congress banned the use of lead solder containing greater than 0.2% lead in 1986.

There are several steps you can take to reduce your exposure to lead in drinking water. These include:

- 1. Run your water to flush out lead.** If water hasn't been used for several hours, allow the water to run at the tap for 15-30 seconds, until it becomes cold, or until it reaches a steady temperature before using it for drinking or cooking. This flushes the lead-containing water from the pipes. The water you run from drinking water taps does not have to be wasted. You can use this water for cleaning purposes or for watering plants. You may want to keep a container of drinking water in your refrigerator, so you don't have to run water every time you need it.
- 2. Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap as lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- 3. Do not boil water to remove lead.** Boiling water will not reduce lead.
- 4. Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact the National Sanitation Foundation at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. If you choose to install a lead removal filter, be sure to maintain and replace the filter device in accordance with the manufacturer's instructions to protect water quality.
- 5. Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
- 6. Identify if your plumbing fixtures contain lead.** New brass faucets, fittings and valves, including those advertised as "lead-free," may contribute lead to drinking water. Current law allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead-free." Visit the National Sanitation Foundation website at www.nsf.org to learn more about lead-containing plumbing fixtures.

For More Information

For more information on reducing lead exposure around your home and health effects of lead, visit EPA's website at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, call your water system or contact your health care provider.

Appendix D



CARUS CORPORATION
315 Fifth Street
P.O. Box 599
Peru, IL 61354
Tel (815) 223-1500 ext. 6833
Fax (815) 224-6896

darin.skutt@caruscorporation.com

To: Hagler Wiley
From: Darin Skutt
Date: 04/22/16
Subject: Carus™ 8100 Water Treatment
Chemical Corrosion Control Program

Carus 8100 has both corrosion inhibition and sequestration properties. The Carus blended poly/orthophosphate will sequester the total hardness factor, iron, and manganese content in the water, and inhibit corrosion by forming a microscopic film on the inside surface of the distribution piping throughout the system. Carus 8100 is N.S.F. certified for potable water. Carus 8100 is a liquid and is introduced with a chemical injection pump. The easiest way to check if you have the correct dose is to measure orthophosphate residuals in the distribution system. A HACH test kit is used to measure orthophosphate in the system. The typical field kit is #5870006, and the customer service number for HACH is 800-227-4224.

Based on the water quality analysis and the monitoring of the corrosion coupons in the system over the last year, the targeted dose below is performing as expected for corrosion control in the distribution system:

Decatur Utilities:

2.75 mg/L as Carus 8100 product (0.25 mg/L as orthophosphate)

If you have any additional questions, please feel free to give me a call.

Darin Skutt
Technical Service Manager
B.S. Chemistry, ACS Certified
Carus Corporation

CARUS WATER

Municipal Drinking Water

CARUS™ 8100 WATER TREATMENT CHEMICAL

DATA SHEET



CARUS™ 8100 water treatment chemical is an effective corrosion inhibitor and sequesterant for use in potable and industrial water systems. CARUS 8100 is also effective as part of a complete well rehabilitation program. The product is a liquid concentrate of exceptional purity, clarity, and stability utilizing sequestering and corrosion control agents.

BENEFITS OF CARUS 8100

- Inhibits corrosion of steel distribution system water lines, iron and galvanized piping, and lead and copper plumbing
- Decreases iron tuberculation to extend the life of the distribution system
- Inhibits lead and copper leaching resulting in lower lead and copper levels in the delivered potable water
- Minimizes the occurrence of microbial-influenced corrosion providing longer life system
- Controls iron and manganese minimizing rusty and dirty water in the system
- Reduces discoloration, staining, and mineral build-up resulting in fewer customer complaints
- Diminishes calcium scale deposits typically seen in hot water lines and heaters
- Saves money by reducing corrosion and scale; lowering chlorine demand and decreasing hydrant flushing, leaks and failures.
- Penetration of well build up including scales and slimes in a well conditioning program

PROPERTIES AND CERTIFICATIONS

Description: Clear homogenous liquid

Freezing Point: Do not Freeze

Specific Gravity: 1.36-1.42

pH (1% w-w): 6.0 ± 0.5

NSF Maximum Feed Rate: 23 mg/L

NSF/ANSI Standard 60, Kosher Approved



HANDLING AND STORAGE

CARUS 8100 water treatment chemical should be handled with care. Wear proper protective equipment including goggles, face shield, apron, respirator and proper gloves when handling this product.

Protect containers from physical damage. Store in a cool, dry area in closed containers. In case of accidental release: contain spill by collecting the liquid in a pit or holding behind a dam (sand or soil). Absorb with inert media and dispose of properly. Disposal of all materials shall be in full and strict compliance with federal, state, and local regulations. Consult the MSDS for additional safety information.

SHIPPING

CARUS 8100 water treatment chemical is generally considered to be safe and is not classified as hazardous according the US Department of Transportation, Canada TDG, UN, IMDG, or IATA regulations.

COMPATIBILITY INFORMATION

CARUS 8100 water treatment chemical can be stored in high-medium density polyethylene, cross-linked polyethylene, fiberglass reinforced plastic, 316 stainless steel, and glass lined/epoxy lined steel tanks. Piping materials may include schedule 80 PVC/CPVC piping, clear PVC, and white polyethylene tubing. Pump materials may include ceramic, Teflon, viton, hypalon and PVC liquid end pump materials.

Metering equipment can include diaphragm and peristaltic type metering pumps and other pumps meeting compatibility requirements.

It is not compatible with black iron, mild steel, galvanized metals, aluminum, zinc, copper, lead, brass, bronze, tin, and other base metals.

CARUS CORPORATION

ONE COMPANY. ENDLESS SOLUTIONS

CORPORATE HEADQUARTERS | 315 FWH Street, Peru, IL 61354 | Tel + 1,815,224,1500 / 1-800-435-8854 | Fax + 1,815,224,6977 | Web: www.caruschen.com | E-Mail: sales@caruschen.com
CARUS EUROPE | Parque Empresarial de ASP® | C/Segunda Roca 3, Planta 1, Oficinas 13-04 | 33428 Cayre, Llanera Spain | Tel +34,985,79,55,11 / Fax +34,985,79,55,10

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CARUS WATER

Municipal Drinking Water

CARUS™ B100 WATER TREATMENT CHEMICAL

DATA SHEET



SHIPPING CONTAINERS

5-gallon (57-lb) Jerrican

Made of high density polyethylene (HDPE). Weighs 3.0 lb (1.36 kg). The net weight is 57 lb (25.85 kg).

15-gallon (171-lb) Drum

Made of high density polyethylene (HDPE). Weighs 6.5 lb (3.0 kg). The net weight is 171 lb (77.6 kg).

30-gallon (342-lb) Drum

Made of high density polyethylene (HDPE). Weighs 14 lb (6.35 kg). The net weight is 342 lb (155 kg).

55-gallon (627-lb) Drum

Made of high density polyethylene (HDPE). Weighs 21 lb (9.5 kg). The net weight is 627 lb (284 kg).

SHIPPING CONTAINERS CONT.

275-gallon IBC (Intermediate Bulk Container)

Weighs 129 lb (58.5 kg). The net weight is 3135 lb (1422 kg). The IBC has a 2 in. butterfly valve with NPT threads in bottom sump.

Bulk Quantities up to 3500 gallons are available.

Other containers may be available, contact Carus Corporation at 800-435-6856 for details.

CARUS VALUE ADDED

LABORATORY SUPPORT

Carus Corporation has technical assistance available to answer questions, evaluate treatment alternatives, and perform laboratory testing. Our laboratory capabilities include: consulting, treatability studies, feasibility studies, and analytical services.

FIELD SERVICES

As an integral part of our technical support, Carus provides extensive on-site treatment assistance. We offer full application services, including technical expertise, supervision, testing, and feed equipment design and installation in order to accomplish a successful evaluation and/or application.

CARUS CORPORATION

During its more than 98-year history, Carus' ongoing emphasis on research and development, technical support, and customer service has enabled the company to become the world leader in permanganate, manganese, oxidation, and base-metal catalyst technologies.

CARUS CORPORATION

ONE COMPANY. ENDLESS SOLUTIONS

CORPORATE HEADQUARTERS | 315 Finn Street, Peru, IL 61354 | Tel + 1,315,222,1500 / 1-800-435-6856 | Fax + 1,315,222,6697 | Web: www.caruschem.com | E-Mail: sales@caruschem.com

CARUS EUROPE | Parque Empresarial de ASP® | C/Secundino Rosas 1, Planta 1, Oficina 15-A | 33428 Gayta, Lugo, Spain | Tel + 34,985,79,05,17 / Fax + 34,985,79,35,10

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Appendix E

SAMPLE PUBLIC EDUCATION

(a) Content of written public education materials.

(i) IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

Decatur Utilities found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

(ii) Health effects of lead. Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

(iii) The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil.

(I) Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals causing of health effects..

(II) Lead can enter drinking water through corrosion of plumbing materials, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to eight percent lead.

Beginning January 2014, changes to the Safe Drinking Water Act further reduced the maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures to 0.25 percent. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially hot water.

(III) Discuss other important sources of lead exposure in addition to drinking water (e.g. paints).

(iv) Lead may work its way into drinking water after the water has entered the distribution system and is on its way to consumer's taps. This usually happens through the corrosion of materials containing lead in household plumbing. These materials include brass faucets, lead solder on copper pipes, lead pipes, or lead service lines connecting the water main to the inside plumbing. Lead pipes are no longer installed for service lines or in household plumbing. Congress banned the use of lead solder containing greater than 0.2% lead in 1986.

(I) Run your water to flush out lead. If water hasn't been used for several hours, allow the water to run at the tap for 15-30 seconds, until it becomes cold, or until it reaches a steady temperature before using it for drinking or cooking. This flushes the lead-containing water from the pipes. The water you run from drinking water taps does not have to be wasted. You can use this water for cleaning purposes or for

watering plants. You may want to keep a container of drinking water in your refrigerator, so you don't have to run water every time you need it.

(II) Use cold water for cooking and preparing baby formula. Do not cook with or drink water from the hot water tap as lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

(III) Do not boil water to remove lead. Boiling water will not reduce lead.

(IV) Look for alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact the National Sanitation Foundation at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. If you choose to install a lead removal filter, be sure to maintain and replace the filter device in accordance with the manufacturer's instructions to protect water quality.

(V) Get your child tested. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

(v) Explain why there are elevated levels of lead in the system's drinking water (if known) and what the water system is doing to reduce the lead levels in homes/buildings in this area.

(vi) Include information on where additional assistance may be obtained. The language which follows is suggested: For more information, call us at 256-552-1480 or visit our website at www.decatutilities.com if applicable. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <http://www.epa.gov/lead> or contact your health care provider.

2. Any additional information presented by a water system shall be consistent with the information above and be in plain language that can be understood by the general public.

3. Any information provided to the public under this rule shall have prior written approval by the Department.

(b) Community water systems shall also discuss lead in plumbing components, the difference between low lead and lead free, and how the consumers can get their water tested.

Appendix F

Sample ID# _____

CONSUMER INSTRUCTIONS FOR PROPER SAMPLE COLLECTION

Important: please follow these directions carefully to ensure that the results at your residence will be as accurate as possible.

These samples are being collected to determine the Lead and Copper levels in your tap water. This sampling effort is required by the US Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM).

We (the water system) will make arrangements with you to deliver the sample bottle to you and to pick up the sample after collection.

Please use only a cold water tap that is used for human consumption, such as the tap in your kitchen or bathroom. Collect samples from a cold water tap that has not been used for at least 6 hours. The best time to sample is usually first thing in the morning or in the evening upon returning from work.

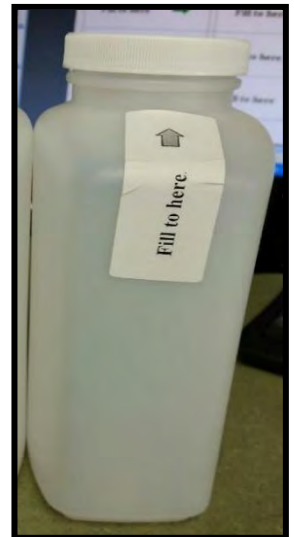
Lead and Copper Sampling “DO NOT”:

- Do not run the faucet at all before collecting the sample.
- Do not use a mop sink, outside faucet, or a tap that is not generally used or intended for human consumption.
- Do not use a faucet at a site which is vacant or from which you have recently been absent.
- Do not use a faucet at a site which has undergone recent (within the last 6 months) plumbing changes
- Do not sample from a tap which is attached to a water softener, filter, or any type of treatment device.
- Do not remove the aerator (screw-on cap at end of faucet) before sampling.

Lead and Copper Sampling Instructions – “DO”:

- Use a kitchen or bathroom cold water faucet for sampling.
- Place the opened sample bottle below the faucet and open the cold water tap to a medium flow as you would to fill a glass of water.
- Fill the sample bottle to the bottom of the bottle neck. (The bottle provided has a sticker with an arrow pointing to the neck. See photo below.)
- Cap the sample bottle tightly and put the bottle back in the zip lock bag provided.
- Please complete the table at the bottom of this page and include it with the sample.
- Place the sample bottle and this sheet in the pick-up location previously arranged with the water system.

Results from the Lead and Copper monitoring at your residence will be provided to you by the water system as soon as practical but no later than 30 days after the system is notified of the sample results. However, if excessive levels of lead or copper are detected, you will be notified immediately after analysis (usually one or two days after the system learns of the tap monitoring results).



| To be completed by the resident and included with the sample: | | |
|--|-------|-------|
| Sample site location and faucet used: (e.g., kitchen sink, bathroom sink) | | |
| Water was last used | Time: | Date: |
| Sample was collected | Time: | Date: |
| <i>I have read the above directions and have taken a tap sample in accordance with these instructions.</i> | | |
| Signature: | | Date: |

Please call Hagler Wiley at Decatur Utilities at (256) 552-1480 if you have any questions about these sampling procedures.

NOTE: please give this form to your water system with the sample.

Appendix G

History of Decatur Utilities Lead & Copper Monitoring

On June 7, 1991, the United States Environmental Protection Agency (USEPA) published in the *Federal Register* final national primary drinking water regulations for lead and copper.

In 1987, Decatur Utilities (DU) began taking steps to ensure the Decatur Water System would be in full compliance with this regulation on or prior to June 1988 by working with the City of Decatur Building Department by prohibiting the use of lead solder in plumbing.

In 1988, DU issued a **Public Notice about Lead in Drinking Water**, informing its customers of potential lead contamination that may occur in **PLUMBING**.

In July 1991, DU received notice from the Alabama Department of Environmental Management (ADEM) informing DU of the Lead and Copper monitoring requirements.

Monitoring Requirements

- (1) DU to begin monitoring January 1992;
- (2) Sixty (60) samples every six (6) months;
- (3) Action levels are 0.015 mg/l for Lead and 1.3 mg/l for copper for the 90th percent highest sample;
- (4) After two (2) consecutive six month samples below action levels, sampling can be reduced to thirty (30) samples one per year, if ADEM approved.

Monitoring Procedure

- (1) Sample to be collected from cold water tap normally used for consumption (kitchen or bathroom);
- (2) Sample is to be first draw from tap after water has remained in line for at least six (6) hours;
- (3) Sample is to be collected by the resident (properly instructed in sampling procedure) and pick-up by DU Water Department

In March 1992, DU collected Lead and Copper samples at seventy-one (71) Tier I monitoring sites throughout Decatur (only 60 sites required). A Tier I monitoring site is classified as follows: *All Single family homes with copper water lines and lead solder constructed after 1982 and/or homes served by lead service lines*. Analysis of these samples was performed by an independent laboratory and the results were submitted to ADEM.

There were no lead service lines found during the sampling procedure (letter dated July 31, 1992).

August 3, 1992 – DU received notification from ADEM that all lead/copper monitoring and reporting requirements for ADEM and EPA during the first monitoring period of January – June 1992, met the action level.

September 18, 1992 – DU received letter from ADEM outlining requirements for reduced monitoring and optimal corrosion control treatment.

In October 1992, DU collected Lead and Copper samples at sixty-four (64) Tier I monitoring sites throughout Decatur (only 60 sites required). Analysis of these samples was performed by an independent laboratory and the results were submitted to ADEM.

December 30, 1992 – DU requests annual Lead/Copper sampling for 1993 based on 1992 test results.

January 8, 1993 – DU receives notification from ADEM that all lead/copper monitoring and reporting requirements for ADEM and EPA during the second monitoring period of July - December 1992, did not exceed the action level.

March 3, 1993 – DU receives approval for reduced lead and copper monitoring to be performed during June, July, August, or September and must maintain and submit optimal corrosion control treatment data monthly.

In August 1993, DU collected Lead and Copper samples at thirty-five (35) Tier I monitoring sites throughout Decatur (only 30 sites required under reduced monitoring). Analysis of these samples was performed by an independent laboratory and the results were submitted to ADEM.

October 22, 1993 – DU receives notification from ADEM that water system met all lead/copper monitoring and reporting requirements for ADEM and EPA during the third monitoring period of June – September 1993, and met the action level.

December 20, 1993 – DU receives notification from ADEM regarding EPA requirements for Corrosion Control Requirements, but requires no action from DU.

October 21, 1994 - DU receives notification from ADEM that water system met all lead/copper monitoring and reporting requirements for ADEM and EPA during the reduced monitoring period of June – September 1994, and did not exceed the action level.

September 25, 1995 - DU receives notification from ADEM that water system met all lead/copper monitoring and reporting requirements for ADEM and EPA during the reduced monitoring period of June – September 1995, and did not exceed the action level.

September 18, 1996 - DU receives notification from ADEM that water system completed lead/copper monitoring for the period of June – September 1996 without exceeding the lead or copper action level.

October 6, 1997 - DU receives notification from ADEM that water system completed lead/copper monitoring for the period of June – September 1997 without exceeding the lead or copper action level.

October 14, 1998 - DU receives notification from ADEM that water system completed lead/copper monitoring for the period of June – September 1998 without exceeding the lead or copper action level.

October 20, 1999 - DU receives notification from ADEM that water system completed lead/copper monitoring for the period of June – September 1999 without exceeding the lead or copper action level.

June 18, 2010 – Large System LCR Optimal Corrosion Control
DU received notification that according to previous lead and copper monitoring results, water system demonstrated optimal corrosion control by having a 90th percentile lead level less than or equal to 0.005 mg/l for two (2) consecutive 6-month monitoring periods and no further action to demonstrate optimal corrosion control is necessary.

June 5th, 2012- Lead & Copper samples collected results are below the action limits established by ADEM & EPA.

June 15 & 16, 2015-Lead & Copper samples collected results are below the action limits established by ADEM & EPA.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

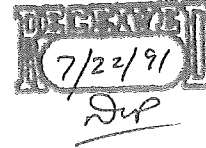


Leigh Pegues, Director

Guy Hunt
Governor

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

July 10, 1991



MEMORANDUM

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) 479-2336
FAX 479-2593

TO: Public Water Systems Serving Greater Than 3,300
Population

FROM: Joe Alan Power, Chief *JAP*
Water Supply Branch, Water Division

SUBJECT: Lead and Copper Monitoring Requirements

EPA has adopted Lead and Copper Regulations which will require special monitoring for lead and copper from distribution samples collected at residential houses constructed after 1983 with copper plumbing and lead solder. Systems with greater than 100,000 population must establish 100 sampling sites and monitor these sites every six months for lead and copper. Systems between 10,000 and 100,000 population must establish sixty monitoring sites and those systems from 3,300 to 10,000 population must establish forty monitoring sites. A one liter sample of water must be taken from the cold water kitchen or bathroom tap after water has remained motionless in the plumbing for at least six hours. This is called the "first draw" sample and is normally obtained first thing in the morning before household activities. Systems greater than 50,000 population must start monitoring by January 1992 and those serving greater than 3,300 population must start monitoring by July 1992.

The purpose of this memo is to alert you to these new federal regulations and allow you to begin evaluation of your service area to find and designate these sampling sites. Much more detailed information will be provided as it is available and we will be revising our drinking water regulations later on this year to reflect these EPA requirements. Those systems that are members of AWWA should have already received a packet of information regarding the Lead and Copper Rule. Since very little guidance has been provided to this office, you may forward your questions to EPA Region IV in Atlanta at 404/347-2913 (Mr. Tom DeGaetano).

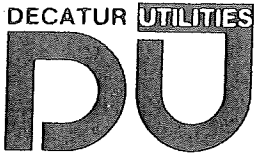
JAP:kd

Copies made for:

*Can
Godwin
Anderson
Subank
Portwood
Brothers*

FILE COPY

Water Analysis



110 JOHNSTON ST. / P.O. BOX 2232 / DECATUR, AL 35609 / PHONE (205) 552-1440

July 31, 1992

Ms. Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch
ADEM
1751 Congressman W.L. Dickinson Drive
Montgomery, AL 36130

Re: Lead/Copper Monitoring

Dear Ms. Westry:

This letter is in response to your July 17, 1992 letter concerning Decatur's lead and copper monitoring. The following comments are made:

- 1) Lead and copper samples were analyzed by Mid-South Testing using the methodology of atomic absorption; furnace technique.
- 2) There were no lead service lines found during the sampling procedure.
- 3) The date of collection and date of analysis for the samples are shown on the attached sheets.
- 4) Samples were taken by the customer, collected by Decatur Utilities personnel and analyzed by Mid-South Testing. Proper procedures were followed.

If you should have any questions, please contact the writer. Thank you.

Sincerely,

Kem M. Carr, P.E.
Chief Engineer & Operating Manager
Gas, Water & Wastewater Dept.

KMC/jk

Attachment

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



Leigh Pegues, Director

Guy Hunt
Governor

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

August 3, 1992

Mr. Kem M. Carr, P.E.
Chief Engineer & Operating Manager
110 Johnston Street
Decatur, Alabama 36509

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
36688
(205) 479-2336
FAX 479-2593

RE: Lead/Copper Monitoring

Dear Mr. Carr:

We are pleased to inform you that your system has met all lead/copper monitoring and reporting requirements for ADEM and EPA during the first monitoring period of January-June, 1992 and met the action level. Please be reminded to utilize the format that was sent to you for the July-December, 1992 monitoring period.

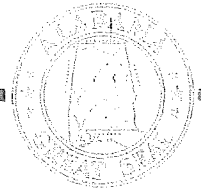
If you have any questions concerning lead/copper monitoring, please call me at 271-7820.

Sincerely,

Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch

LW/iw





Leigh Pegues, Director

Guy Hunt
Governor

September 18, 1992

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

Mr. Ken M. Carr, P.E.
Chief Engineer & Operations Manager
Decatur Utilities
110 Johnson Street
Decatur, Alabama 36509

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

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

Dear Mr. Carr:

RE: Lead/Copper Reduced Monitoring

Large systems which have completed two consecutive sampling periods demonstrating action level compliance for lead and copper may reduce monitoring. Large systems must maintain the range of values for water quality parameters reflecting optimal corrosion control treatment during each of two consecutive six-month monitoring periods.

Optimal corrosion control can be demonstrated when using either of these methods: (1) the Baylis curve indicates no incrusting or corrosion will occur, (2) the Langelier Index is between -1.0 to +2, (3) the Ryznar Index is between 7 and 11, (4) a phosphate or silicate corrosion inhibitor is continuously applied at the manufacturer/supplier recommended level resulting in minimum complaints, or (5) the Calcium Carbonate Precipitation Potential (CCPP) is maintained between 4-10 mg/l. Your system is responsible for identifying the method it will use to determine optimal corrosion control and providing this information to ADEM.

Water quality parameters required using method (1) are pH and alkalinity; method (2) and (3) are pH, total alkalinity (mg/l), temperature, calcium (mg/l), and total dissolved solids (mg/l); method (4) are pH, phosphate or silica; or method (5) are alkalinity in finished water (representing the alkalinity of solution prior to precipitation of calcium carbonate) and equilibrium alkalinity (resulting after precipitation of the calcium carbonate content beyond saturation). In no instance shall a pH of less than 7.0 be maintained in the distribution system.



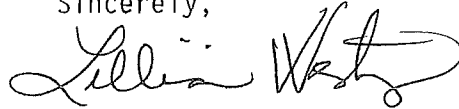
Page 2
September 18, 1992

After submittal of data for water quality parameters indicating optimal corrosion control is being practiced (for two consecutive six month monitoring periods), a reduction to annual sampling can be requested. Unlike the medium and small systems which can ultimately reduce monitoring to once every 3 years, large system monitoring cannot be reduced to less than annually. When sampling annually, the system shall conduct the lead and copper tap sampling during the months of June, July, August, or September.

ADEM will review the information submitted from your water system and if satisfactory, authorize a reduced monitoring frequency in writing.

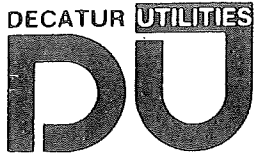
Data from operation data reports can be used to indicate optimal corrosion control treatment. Therefore, all required information must be submitted on operation data reports. Should you have questions regarding lead and copper monitoring that remain unanswered, please contact me at 271-7820.

Sincerely,



Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch

LW/iw



1002 CENTRAL PARKWAY SW / P.O. BOX 2232 / DECATUR, AL 35609 / PHONE (205) 552-1440

December 30, 1992

Ms. Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch
ADEM
1751 Congressman W.L. Dickinson Drive
Montgomery, AL 36130

Re: Second Lead/Copper Results
Decatur Water System
Decatur, AL

Dear Ms. Westry:

Please find the attached results of the second lead/copper sampling of sites served by the Decatur, Alabama water system. All samples were below action levels set for lead and copper.

Typical Decatur potable water is characterized by the following in determining the Langelier index; Water Temperature of 70°F or 21°C, $Ca^{+2} = 45$ mg/L or 113 mg/L as $CaCO_3$, Alkalinity = 64 mg/L as $CaCO_3$, Total Dissolved Solids = 100 mg/L, pH (potable water) = 7.93. $LI = 7.93 - 8.01$ (pH_s) = -0.08 (non corrosive)

Decatur requests that lead/copper sampling be reduced to once per year for calendar year 1993. Thank you for your attention to this matter.

Sincerely,

Kem M. Carr, P.E.
Chief Engineer & Operating Manager
Gas, Water & Wastewater Dept.

KMC/jk

Attachment

ADEM



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

Guy Hunt
Governor

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

January 8, 1993

Field Offices:

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

Mr. Ken Carr, P.E.
Chief Engineer & Operations Manager
Decatur Utilities
110 Johnson Street
Decatur, Alabama 36509

RE: Lead/Copper Monitoring

Dear Mr. Carr:

We are pleased to inform you that your system has met all lead/copper monitoring and reporting requirements for ADEM and EPA during the second monitoring period of July-December, 1992 and did not exceed the action level. After review of your file, we will advise you as to whether or not you can reduce monitoring.

If you have any questions concerning lead/copper monitoring, please call me at 271-7776.

Sincerely,

Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch

LW/iw

WATER
LEAD/COPPER
FILE



ADEM



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

Guy Hunt
Governor

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

March 3, 1993

DECATUR UTILITIES
ATTN: DAVID PARKS, MANAGER
P O BOX 2232
DECATUR AL 35602

Field Offices:

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

RE: Lead/Copper Reduced
Monitoring

P.O. Box 953
Decatur, AL
35602

ATTN: DAVID PARKS, MANAGER:

(205) 353-1713
FAX 340-9359

Since you have completed the initial two rounds of monitoring with the 90th percentile level for lead and copper below the Action Level, reduced lead and copper monitoring is being approved. Monitoring for lead and copper must be conducted during the months of June, July, August or September each year from 50 established sampling sites. Also, the water system must maintain the range of values for the water quality control parameters reflecting optimal corrosion control treatment and this data must be submitted monthly.

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

If there are any questions regarding this correspondence or lead and copper monitoring, please contact me at 271-7776.

Sincerely,

Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch

LAW/iw

*To Memphis
Water Analysis
"Lead Copper"
File*



ADEM



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

Jim Folsom
Governor

October 22, 1993

Mailing Address:

PO BOX 301463
MONTGOMERY AL
36130-1463

Mr. Kem M. Carr, P.E.
DECATUR UTILITIES
Post Office Box 2232
Decatur, AL 35602

Physical Address:

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

RE: Lead/Copper Monitoring
PWSID #1084
Morgan County

(205) 271-7700

FAX 271-7950
270-5612

Dear Mr. Carr:

We are pleased to inform you that your system has met all lead/copper monitoring and reporting requirements for ADEM and EPA during the third monitoring period of June - September 1993 and met the action level. Please be reminded to utilize the format that was sent to you for the fourth monitoring period of June - September 1994 using the same initial monitoring sites.

Field Offices:

110 Vulcan Road
Birmingham, AL
9-4702
942-6168
FAX 941-1603

If you have any questions concerning lead/copper monitoring, please call me at 271-7776.

400 Well Street
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX 340-9359

Sincerely,

Lillian Westry, Engineer
Lead/Copper Compliance
Water Supply Branch

2204 Perimeter Road
Mobile, AL
36615-1131
(205) 450-3400
FAX 479-2593

LW/cr



ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

James W. Warr, Director



Jim Folsom
Governor

Joe Worthington

Return!

[Handwritten signature]

December 20, 1993

Mailing Address:
PO BOX 301463
MONTGOMERY AL
36130-1463

Mr. David Parks
Decatur Utilities
P. O. Box 2232
Decatur, Alabama 35602

Physical Address:
1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

RE: Corrosion Control
Requirements

(205) 271-7700
FAX 270-5612

Dear Mr. Parks:

Field Offices:

110 Vulcan Road
Birmingham, AL
35209-4702
(205) 942-6168
FX 941-1603

400 Well Street
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615-1131
(205) 450-3400
FAX 479-2593

In response to EPA Lead and Copper regulations which were adopted June 7, 1991, we revised our drinking water regulations to reflect federal requirements but at the same time tried to take into consideration the activities of water systems in the state to provide corrosion control and thus our regulations, while we feel they were as stringent, are certainly not the same as EPA. We submitted a primacy application to EPA for concurrence with our regulations and only recently received a written response indicating disagreement with several provisions. Two of these provisions may impact the activities of your system and we are currently trying to work out some level of understanding with EPA in this regard.

EPA regulations arbitrarily require all systems serving greater than 50,000 population to either conduct a elaborate corrosion control study to determine what the optimum corrosion control process should be in the system or else provide detailed information which would demonstrate that such studies have been performed in the past and that optimum corrosion control processes are in place. This report would require submittal of test samples for water quality parameters, an explanation of test methods used by the water system to evaluate corrosion control treatment, information regarding how corrosion control processes have been installed and how the process is maintained to ensure minimum lead and copper leaching and results of tap water sampling from the distribution system demonstrating that corrosion control is satisfactory. We view this requirement as overkill and easily documented that all ten systems over 50,000 population have practiced corrosion control for many years and the lead and copper action levels for all of these systems have been satisfactory during the three monitoring periods thus far. I do not argue with the need for such requirements in the federal regulations since it appears that many water systems in other states have never practiced corrosion control and more than 50% of large systems in other states have exceeded the lead action level.

FILE COPY

Water Analysis

Page 2
December 20, 1993

At this point I am not requesting that you provide any additional information nor start any studies but should the negotiations with EPA be unsuccessful, we may need to meet and discuss these requirements in the near future.

The other provision that would directly affect your system is the requirement for systems over 50,000 to monitor for specific corrosion control parameters in selected sites in the distribution system. This requirement also pertains to medium and small systems but only when they have exceeded the action level for lead or copper. I feel it is more important to maintain specific water quality characteristics after treatment to demonstrate continued proper corrosion control. It may be possible that selected sites must be obtained in your distribution system and our department would be required by EPA to determine those specific parameters which reflect the type of corrosion control treatment you were using and monitoring must take place at a set frequency.

The majority of the other points in negotiations with EPA deal with a difference in interpretation of our regulations and thus we may be required to modify our regulations to address all these issues. We will keep you informed as to any progress being made. Hopefully we will have better news after the New Year. In the interim I hope you have a happy holiday.

Sincerely,

A handwritten signature in cursive script that reads "Joe Alan Power".

Joe Alan Power, Chief
Water Supply Branch

JAP/iw

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



James W. Warr, Director

Jim Folsom
Governor

October 21, 1994

Mailing Address:
PO BOX 301463
MONTGOMERY AL
36130-1463

Physical Address:
1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

(205) 271-7700
FAX 270-5612

Field Offices:

110 Vulcan Road
Birmingham, AL
35209-4702

(205) 942-6168
(205) 941-1603

400 Well Street
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615-1131
(205) 450-3400
FAX 479-2593

Mr. Kem M. Carr, P.E.
DECATUR UTILITIES
Post Office Box 2232
Decatur, AL 35602

RE: Reduced Lead/Copper Monitoring
PWSID #1084
Morgan County

Dear Mr. Carr:

We are pleased to inform you that your system has met all lead/copper monitoring and reporting requirements during the reduced monitoring period of June - September 1994 and did not exceed the action level. You have now completed your second year (third round) of monitoring and you must collect the same reduced sites during the **June, July, August or September 1995** period.

If you have any questions concerning lead/copper monitoring, please feel free to contact me at 271-7776.

Sincerely,

Lillian Tisdale, Engineer
Lead/Copper Compliance
Water Supply Branch

LT/cr

CC: Mr. David Parks

FILE COPY

Water, "Lead + Copper"



ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



Fob James, Jr.
Governor

~~XXXXXXXXXX~~ James W. Warr
~~XXXXXXXXXX~~ Acting Director

September 25, 1995

(334) 271-7700

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

Mr. Kem M. Carr, P.E.
Decatur Utilities
P.O. Box 2232
Decatur, AL 35602

Mailing Address:
PO Box 301463
Montgomery, AL
36130-1463

RE: Reduced Lead/Copper Monitoring
PWSID #1084
Morgan County

FAX: (334)
Admin: 271-7950
Air: 279-3044
Land: 279-3050
Water: 279-3051
Sp Proj: 213-4399
Field Ops: 272-8131
Backup: 270-5612

Dear Mr. Carr:

We are pleased to inform you that your system has met all lead/copper monitoring and reporting requirements during the reduced monitoring period of June - September 1995 and did not exceed the action level. You have now completed your third year (fourth round) of monitoring and you must collect the same reduced sites during the **June, July, August or September 1996** period.

Field Offices:

110 Vulcan Road
Birmingham, AL
35209-4702
(205) 942-6168
FAX: 941-1603

If you have any questions concerning lead/copper monitoring, please feel free to contact me at (334)271-7776.

400 Well St, NE
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX: 340-9359

Sincerely,

A handwritten signature in cursive script that reads "Lillian Tisdale".

Lillian Tisdale, Engineer
Lead/Copper Compliance
Water Supply Branch

2204 Perimeter Rd
Mobile, AL
36615-1131
(334) 450-3400
FAX: 479-2593

LT/cr

FILE COPY



ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



Fob James, Jr.
Governor

James W. Warr
Director

September 18, 1996

(334) 271-7700

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

Kem Carr, Plant Manager
Decatur Utilities
P O Box 2232
Decatur, Al 35609

Mailing Address:
PO Box 301463
Montgomery, AL
36130-1463

Re: Lead/Copper Monitoring
Pwsid #1084
Morgan County

FAX: (334)
Admin: 271-7950
Air: 279-3044
Land: 279-3050
Water: 279-3051
Sp Proj: 213-4399
Field Ops: 272-8131
Backup: 270-5612

Dear Sir:

Decatur Utilities has completed lead and copper monitoring for the period of June - September 1996 without exceeding the lead or copper action level. The next monitoring period for the system will be the period of June - September 1997.

Field Offices:

... Vulcan Road
Birmingham, AL
35209-4702
(205) 942-6168
FAX: 941-1603

If you have any questions concerning lead and copper monitoring, please feel free to contact either Benny Laughlin at (334) 271-7985 or myself at (334) 271-7791.

400 Well St, N.E.
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX: 340-9359

Sincerely,

Thomas S DeLoach
Water Supply Branch
ADEM

2204 Perimeter Rd
Mobile, AL
36615-1131
(334) 450-3400
FAX: 479-2593

TSD/td

FILE COPY

Lead + Copper

ADEM



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

POST OFFICE BOX 301463 ♦ 1751 CONG. W. L. DICKINSON DRIVE 36109-2608
MONTGOMERY, ALABAMA 36130-1463
(334) 271-7700

JAMES W. WARR
DIRECTOR

FOB JAMES, JR.
GOVERNOR

October 6, 1997

Mr. Kem Carr, Plant Manager
Decatur Utilities
P O Box 2232
Decatur, AL 35609

Facsimiles: (334)
Administration: 271-7950
Air: 279-3044
Land: 279-3050
Water: 279-3051
Groundwater: 270-5631
Field Operations: 272-8131
Laboratory: 277-6718
Education/Outreach: 213-4399

Re: Lead/Copper Monitoring
Pwsid #1084
Morgan County

Dear Mr. Carr:

Decatur Utilities has completed lead and copper monitoring for the period of June - September 1997 without exceeding the lead or copper action level. The next monitoring period for the system will be the period of June - September 1998.

If you have any questions concerning lead and copper monitoring, please feel free to contact either Benny Laughlin at (334) 271-7985 or myself at (334) 271-7791.

Sincerely,

Thomas S DeLoach
Water Supply Branch
ADEM

TSD/td



*Water
"Lead + Copper"*

ADEM



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

POST OFFICE BOX 301463 ♦ 1751 CONG. W. L. DICKINSON DRIVE 36109-2608
MONTGOMERY, ALABAMA 36130-1463
(334) 271-7700

JAMES W. WARR
DIRECTOR

FOB JAMES, JR.
GOVERNOR

October 14, 1998

Mr. Kem M. Carr, Manager
Decatur Utilities
P O Box 2232
1002 Central Parkway S W
Decatur, AL 35609

Facsimiles: (334)
Administration: 271-7950
Air: 279-3044
Land: 279-3050
Water: 279-3051
Groundwater: 270-5631
Field Operations: 272-8131
Laboratory: 277-6718
Education/Outreach: 213-4399

Re: Lead/Copper Monitoring
Pwsid #0001084
Morgan County

Dear Mr. Carr:

Decatur Utilities has now completed their 1998 lead and copper monitoring for the period of June – September 1998 without exceeding the lead or copper action level. The next monitoring period for the system will be the period of June - September 1999.

If you have any questions concerning lead and copper monitoring, please feel free to contact either Laura Taylor at (334) 271-7790 or myself at (334) 271-7791.

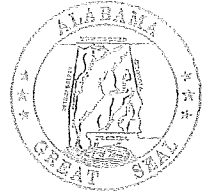
Sincerely,

Thomas S DeLoach
Water Supply Branch
ADEM

TSD/td/lat

FILE COPY

LEAD/COPPER



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

STATE OFFICE BOX 301463 ♦ 1400 COLISEUM BLVD. 36110-2053

MONTGOMERY, ALABAMA 36130-1463

WWW.ADEM.STATE.AL.US

(334) 271-7700

JAMES W. WARR
DIRECTOR

DON SIEGELMAN
GOVERNOR

October 20, 1999

Mr. Kem M. Carr, Manager
Decatur Utilities
1002 Central Parkway SW
P.O. Box 2232
Decatur, Alabama 35609

Facsimiles: (334)
Administration: 271-7950
General Counsel: 394-4332
Air: 279-3044
Land: 279-3050
Water: 279-3051
Groundwater: 270-5631
Field Operations: 272-8131
Laboratory: 277-6718
Mining: 394-4326
Education/Outreach: 394-4383

Re: Lead/Copper Monitoring
Pwsid #0001084
Morgan County

Dear Mr. Carr:

Decatur Utilities has now completed their 1999 lead and copper monitoring without exceeding the lead or copper action level. The system will continue to monitor for lead and copper every year. The next monitoring period for the system will be the period of June - September 2000.

If you have any questions concerning lead and copper monitoring, please feel free to contact either Laura Taylor at (334) 271-7790 or myself at (334) 271-7791.

Sincerely,

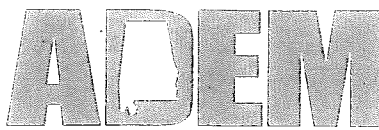
Thomas S DeLoach
Water Supply Branch
ADEM

TSD/lat

FILE COPY



LANCE R. LEFLEUR
DIRECTOR



BOB RILEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2059 ♦ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700
FAX (334) 271-7950

June 18, 2010

Mr. Gary Borden, GW and W Manager
Decatur Municipal Utilities Board
P O Box 2232
Decatur, AL 35609

Re: Large System LCR Optimal Corrosion Control
Pwsid #1084
Morgan County

Dear Mr. Borden:

Under the requirements of the Department's Lead and Copper Regulations (335-7-11), all water systems serving greater than 50,000 persons are required to practice optimal corrosion control. Optimal corrosion control is demonstrated when the 90th percentile lead level is less than or equal to 0.005 mg/l for two consecutive 6-month monitoring periods. Systems that can not meet the 90th percentile lead level of 0.005 mg/l for two consecutive 6-month monitoring periods, must demonstrate optimal corrosion control by monitoring corrosion control parameters.

According to previous lead and copper monitoring results, your system demonstrated optimal corrosion control by having a 90th percentile lead level less than or equal to 0.005 mg/l for two consecutive 6-month monitoring periods and no further action to demonstrate optimal corrosion control is necessary.

If you have any questions concerning this matter, please contact Tom DeLoach at (334) 271-7791.

Sincerely,

A handwritten signature in black ink that reads "Dennis D. Harrison". The signature is written in a cursive, flowing style.

Dennis D. Harrison, Chief
Drinking Water Branch
ADEM

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (Fax)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (Fax)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (Fax)

Mobile - Coastal
4171 Commanders Drive
Mobile, AL 36615-1421
(251) 432-6533
(251) 432-6598 (Fax)