

Olszewski, Rosemarie (DEQ)

From: Thelen, Mary Beth (DEQ)
Sent: Thursday, November 05, 2015 7:57 AM
To: Olszewski, Rosemarie (DEQ)
Subject: FW: Flint MI: LCR Enforcement Issues
Attachments: image003.png; ATT00001.htm; Flint LCR for FOIA 6429-15 (5).pdf; ATT00002.htm; FOIA 15-585 Part 2 55pgs (12).pdf; ATT00003.htm

Please print.

From: Shekter Smith, Liane (DEQ)
Sent: Monday, September 21, 2015 11:56 AM
To: Busch, Stephen (DEQ); Benzle, Richard (DEQ); Sygo, Jim (DEQ); Wurfel, Brad (DEQ); Pallone, Maggie (DEQ); Wyant, Dan (DEQ)
Cc: Thelen, Mary Beth (DEQ); Feuerstein, Heather (DEQ); Shaler, Karen (DEQ); Devereaux, Tracy Jo (DEQ)
Subject: FW: Flint MI: LCR Enforcement Issues

EPA just shared the attached

From: Fortin, Denise [<mailto:Fortin.Denise@epa.gov>]
Sent: Monday, September 21, 2015 11:44 AM
To: Shekter Smith, Liane (DEQ)
Subject: Fwd: Flint MI: LCR Enforcement Issues

Sent from my iPhone

Begin forwarded message:

From: "Henry, Timothy" <henry.timothy@epa.gov>
To: "Fortin, Denise" <Fortin.Denise@epa.gov>
Subject: FW: Flint MI: LCR Enforcement Issues

Tim Henry
 Deputy Director, Water Division
 U.S. EPA (W-15J)
 77 W. Jackson Blvd., Chicago, IL 60604-3590
 Phone: 312.886.6107 Fax: 312.692.2578

From: Damato, Nicholas
Sent: Monday, September 21, 2015 7:56 AM
To: Henry, Timothy; Hyde, Tinka
Subject: FW: Flint MI: LCR Enforcement Issues
Importance: High

Tim & Tinka,

Miguel forwarded the email below from Marc Edwards. Miguel then called because he wanted Tinka to have a heads up especially on the info in the ACLU video and didn't want her blindsided with the content -- it should be reviewed carefully. Tom, Rita, Heather, Jennifer, Miguel & I will be having a call with ORC & OECA this morning on Marc's email.

Nick

From: Deltoral, Miguel
Sent: Monday, September 21, 2015 6:52 AM
To: Damato, Nicholas
Subject: Fw: Flint MI: LCR Enforcement Issues
Importance: High

Just noticed you weren't copied on this...

Miguel A. Del Toral
 Regulations Manager
 U.S. EPA R5 GWDWB
 77 West Jackson Blvd, (WG-15J)
 Chicago, IL 60604
 Phone: (312) 886-5253

From: Marc Edwards <edwardsm@vt.edu>
Sent: Sunday, September 20, 2015 09:29 PM
To: Schock, Michael; Lytle, Darren; kempic.jeffrey@epa.gov; Burneson, Eric; demarco.carol@epa.gov; Murphy, Thomas; Shoven, Heather; Deltoral, Miguel
Subject: Flint MI: LCR Enforcement Issues

Mike, Darren, Jeff, Eric, Carol and Miguel and R5 MI/Enforcement personnel (as listed on the R5 webpage).

In this e-mail, I am making you aware of what we know regarding the Flint lead situation.

1) They do not have an approved lead sampling pool. Only 13 of the lowest lead sampled homes from 2014, were resampled in 2015.

The homes sampling high in 2014, were not asked to be resampled.

At best, their program is sending out sampling bottles at random across the city.

2) This message exemplifies the type of site selection, that they are doing to satisfy their high risk LCR monitoring pool site.

That is, none. They are not even hiding it.

<http://www.flintneighborhoodsunited.org/drinking-water-testing/>.

3) Furthermore, in a video now on the ACLU website, at the end of the interview, Mike Glasgow (Flint LCR program) notes what is perfectly obvious from looking at the MDEQ FOIA materials.

"we threw out bottles everywhere just to collect as many as we can, just to hit our number, and we just turn in every result we get in."

Moreover, they do not have the records to show the homes have lead pipe. *"we are still looking for the records"*

See video here. Start at 4 minutes and 13 seconds to see the admission. <https://vimeo.com/139882021>

4) On top of that, according to my count, MDEQ covered up no fewer than 5 violations in the 2015 sample round. These include:

a) Technical violation in that what they now stamp as the "draft" report (attached) is late (the signed date is 7/28/2015).

It was due 7/10/2015. The final "revised" report is dated 8/20/2015 (also attached), which is 40 days late.

b) Although 87 sites from 2014 were not resampled, no written justification for the site changes was provided in the FOIA materials, and this is required by law.

The statement given today by Flint, that residents were not resampled because they did not want to participate, is contradicted by my conversations with residents.

c) In the original 71 samples Flint submitted late, the lead 90%ile action level was exceeded. MDEQ took the initiative to invalidate 2 samples, dropping Flint below the Action Level.

Flint never requested in writing that any of the samples be invalidated (see the comments written in the box of page 1, FOIA 15-585).

Mike Glasgow says that the 2 high samples were deleted based on the conference call. Only the high samples were scrutinized for meeting the sample pool criteria.

No low samples were investigated. I have the e-mails.

4) The "Draft 7/28/2015" and "revised 8/20/2015" LCR reports, on page 1, check boxes that note Tier 1 sites are not used. MDEQ asks no questions about that. In video Mike admits he has no knowledge of what sites actually have lead pipe or not.

5) Flint did not achieve the minimum number of samples as determined before the sampling round. In his e-mail Mike Glasgow (see below, and see FLINT LCR FOR FOIA...pdf) acknowledges this will be a technical violation. The draft LCR clearly indicates that the minimum was not achieved. MDEQ responds "we are discussing options" to handle this technical violation. In the August 20th revised final report, even this technical violation magically disappears (see comments box on page 1....).

 To: 'Michael Glasgow'
 Cc: Brent Wright
 Subject: RE: lead/copper

we are discussing options regarding this and future rounds of monitoring and will get back with you.

thanks,

Adam Rosenthal, EQA
 MDEQ – Office of Drinking Water and Municipal Assistance
 Lansing District – Constitution Hall 1SW
 PO Box 30242
 Lansing, MI 48909
 517-284-6644
 fax: 517-241-3571

For MORs, Lab Results & Reporting Forms:
DEQ-DWMA-Lansing@michigan.gov

From: Michael Glasgow [mailto:mglasgow@cityofflint.com]
 Sent: Thursday, July 09, 2015 2:19 PM
 To: Rosenthal, Adam (DEQ)
 Cc: Brent Wright
 Subject: Re: lead/copper

Adam,

I just sent the last of the samples to the lab today. Unfortunately we did not reach 100 samples. I believe the count I have is 76 total. Since we have had a few more hits this round, we are going to continue to solicit samples for our own informational purposes. I am disappointed in the turnout of sampling, we distributed close to 200 sample bottles. With this monitoring violation will we be required to collect another round of 100

DEPARTMENT OF ENVIRONMENTAL QUALITY
OF DRINKING WATER AND MUNICIPAL ASSISTANCE
AND COPPER REPORT AND
CONSUMER NOTICE OF LEAD RESULT
CERTIFICATE FOR COMMUNITY WATER SUPPLY

DRAFT



Issued under authority of 1976 PA 399, MCL 325.1001 *et al.*, and Administrative Rules, as amended.
Failure to submit this information is a violation of Act 399 and may subject the water supply to enforcement penalties.

Administrative Rule R 325.10710d requires water supplies to report lead and copper monitoring information within 10 days after the end of the monitoring period. This form may be used to meet this requirement. Submit the information to the appropriate Department of Environmental Quality (DEQ) district office. For district office addresses, visit www.michigan.gov/deq and click on Locations.

1. Water Supply Name: City of Flint Water Plant
 2. County: Genesee 3. WSSN: 2310
 4. Population: 99,763 5. Monitoring Period: From: 1/1/15 To: 6/30/15
 6. Minimum # of Samples Required: 10060 7. # of Samples Taken: 11769
 8. Name of Certified Laboratory: DEQ Drinking Water Laboratory

9. SAMPLE CRITERIA:

Yes	No	Explain No responses in Comments block.
☐	☒	a. Are the same sampling points used as in the previous monitoring period?
☐	☒	b. Are all samples from Tier 1 sites?
☒	☐	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?
☒	☐	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the system?
☒	☐	e. Is the minimum number of lead service line samples taken (when applicable)?

For more information see instructions paragraph 11, subparagraph "Sample Category."

Comments:
 A total of 175 sample bottles and instructions were distributed to city residents. We are continuing to solicit samples due to the fact that we did not reach the minimum number for this monitoring period.

Lead service - majority (30,000?)

10. NAME:

Name: Michael GlasgowTitle: Utilities AdministratorPhone: 810-766-7135Date: 7/28/2015

11. TAP SAMPLING DATA: (Use additional sheets as needed)

DRAFT

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumb-ing ²	Lead (ppb)	Copper (ppb)	Lab #
2205 Flusing Rd	2/15/15	1	L	C,P	N.D.	0.13	54663
212 Browning Ave.	2/18/15	1	L	P	104	N.D.	54945
1809 Stevenson St.	2/10/15	1	L	P	10	N.D.	54956
4202 Custer Ave.	3/4/15	1	L	C,P	6	0.27	56223
401 E. Newall St.	3/2/15	1	L	P	6	N.D.	56225
215 Browning Ave. <i>ok</i>	3/21/15	1	L	C,P	N.D.	0.16	56226
2615 Trumbull Ave.	2/27/15	1	L	C,P	3	N.D.	56227
201 Browning Ave. <i>ok</i>	3/5/15	1	L	P	N.D.	N.D.	56228
1224 Decker St.	3/17/15	1	L	C,P	13	0.10	57728
1220 Decker St.	3/17/15	1	L	P	4	N.D.	57730
1379 Washington Ave.	3/19/15	1	L	P	8	N.D.	57731
1383 Washington Ave.	3/19/15	1	L	C,P	6	0.17	57734
1372 Washington Ave.	3/19/15	1	L	C,P	2	0.14	57733
1367 Washington Ave.	3/17/15	1	L	P	1	N.D.	57735
1701 Marquette Dr.	3/14/15	1	L	C,P	1	0.19	57736
778 Bundy Ave.	3/24/15	1	L	P	N.D.	N.D.	58413
3714 Beecher Rd.	3/24/15	1	L	C	2	0.52	58414
1016 Ingleside Ave.	4/9/15	1	L	C,P	7	0.07	59749
1818 Rock Creek Ln.	4/6/15	1	L	C,P	3	0.11	59750
3010 Cheyenne St.	4/3/15	1	L	C,P	5	0.10	59751

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

DRAFT

Water Supply Name/County City of Flint Water Plant

WSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumb-ing ²	Lead (ppb)	Copper (ppb)	Lab #
2806 Mountain Ave.	4/15/15	1	L	P	N.D.	N.D.	60546
2020 Crooked Ln.	4/24/15	1	L	C,P	5	0.10	61845
310 E. Moore St.	4/22/15	1	L	P	5	N.D.	61846
631 Alvord Ave.	5/6/15	1	L	P	42	N.D.	63410
216 Browning Ave.	5/7/15	1	L	C,P	22	0.31	63411
3714 Beecher Rd.	5/14/15	1	L	C,P	8	0.15	64283
625 S. Grand Traverse	5/18/15	5	L	C,P	20	0.14	64284 X
912 Lexington Ave.	5/15/15	1	L	P	6	N.D.	64285
349 Robbie Ln.	5/31/15	1	L	P	2	N.D.	67428
353 Robbie Ln.	5/30/15	1	L	C,P	5	0.11	67427
341 Robbie Ln.	5/31/15	1	L	C,P	3	0.05	67426
328 Robbie Ln.	5/30/15	1	L	C,P	2	0.09	67425
357 Robbie Ln.	5/31/15	1	L	C	3	0.20	67424
344 Robbie Ln.	5/31/15	1	L	C,P	4	0.11	67423
1807 Oren Ave.	6/8/15	1	L	P	21	N.D.	68023
421 Lyon St.	6/14/15	1	L	C,P	7	0.14	68788
1528 Delaware Ave.	6/12/15	1	L	P	3	N.D.	68789
3811 Brentwood Dr.	6/14/15	1	L	P	42	N.D.	68790
1615 S. Franklin Ave.	6/14/15	1	L	P	N.D.	N.D.	68791
853 E. 7 th St.	6/12/15	1	L	C,P	7	0.07	68792

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumbing ²	Lead (ppb)	Copper (ppb)	Lab #
1150 Woodside Dr.	6/14/15	1	L	P	29	N.D.	68793
547 Copernan Blvd.	6/14/15	1	L	P	18	N.D.	68794
920 Stocker Ave.	6/21/15	1	L	P	1	N.D.	69622
742 Lincoln Ave.	6/19/15	1	L	P	2	N.D.	69623
3517 Bennett Ave.	6/24/15	1	L	C,P	3	0.06	69624
1730 Overhill Dr.	6/22/15	1	L	C,P	1	0.08	69625
2117 Stanford Ave.	6/23/15	1	L	C,P	5	0.08	69626
2432 Beta Ln.	6/21/15	1	L	P	N.D.	N.D.	69627
2023 Miller Rd.	6/21/15	1	L	C,P	3	0.06	69628
721 East St. Apt #2	6/25/15	4	L	C,P	10	0.16	70222
3814 Whitter	6/25/15	1	L	P	2	N.D.	70223
3120 Norwood	6/24/15	1	L	P	5	N.D.	70224
2122 Pierce St.	6/21/15	1	L	P	2	N.D.	70225
3521 Bennett Ave.	6/25/15	1	L	P	3	N.D.	70226
1602 Raspberry Ln.	6/24/15	1	L	P	N.D.	N.D.	70227
1809 Lynbrook	6/26/15	1	L	P	3	N.D.	70228
2112 Sherff	6/24/15	1	L	C,P	9	0.06	70229
1205 Blanchard Ave.	6/24/15	1	L	C,P	11	0.05	70230
860 Schafer St.	6/26/15	1	L	C,P	N.D.	0.08	70231
2110 Flushing Rd.	6/30/15	1	L	C	N.D.	0.10	71158

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

2.0

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumb-Ing ²	Lead (ppb)	Copper (ppb)	Lab #
2300 Flushing Rd.	6/29/15	1	L	C	3	0.28	71159
2130 Flushing Rd.	6/28/15	1	L	C,P	6	0.05	71160
2202 Flushing Rd.	6/29/15	1	L	C,P	2	0.06	71162
2429 Flushing Rd.	6/30/15	1	L	C,P	N.D.	0.06	71163
4013 Brownell Blvd.	6/29/15	1	L	C,P	2	0.08	71165
2414 Flushing Rd.	6/30/15	1	L	P	N.D.	N.D.	71166
1914 Penbrook Ln	6/29/15	1	L	P	2	N.D.	71167
3901 Leedra St.	6/26/15	1	L	P	N.D.	N.D.	71168
3142 McClure	6/26/15	1	L	P	3	N.D.	71169
2114 Flushing Rd.	6/30/15	1	L	C,P	5	0.05	71170
709 Frost St.	6/30/15	1	L	P	2	N.D.	72033

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

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TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

Consumer Notice of Lead Result in Drinking Water

DRAFT

Water Supply Name: City of Flint
 County: Genesee WSSN: 2310
 Sample Location: 401 E. Newall St. Date Sampled: 3/2/15

Thank you for participating in the lead and copper monitoring of drinking water. The levels of lead and copper found at your location are in the table below.

Key to Table	Contaminant	AL	MCLG	Your Result
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. Maximum Contaminant Level Goal (MCLG): 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. ppb: parts per billion or micrograms per liter.	Lead (ppb)	15	0	5
	Copper (ppb)	1300	1300	Not Detected

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 it 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.

To reduce exposure to lead in drinking water:

- *Run your water to flush out lead.* Run the water until it becomes cold.
- *Use cold water for cooking and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily in hot water.
- *Do not boil water to remove lead.* Boiling water will not reduce lead levels.
- *Look for alternative sources or treatment of water.* If your lead result is above 15 ppb, 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 NSF International at 800-NSF-8010, or www.nsf.org for information on performance standards for water filters.
- *Identify if your plumbing fixtures contain lead.* New faucets, fittings, and valves, may contain up to 8 percent lead including those advertised or labeled as "lead-free" and may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Although the primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil, the U.S. EPA estimates that 10 to 20 percent of human exposure to lead may come from drinking water.

For more information, contact us at: City of Flint Water Plant (810) 787-6537

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

Certification:

I certify that this public water supply has provided the consumer notice of lead result to persons served at each of the taps that was tested, either by mail or by another method approved by the DEQ, within 30 days of knowing the result. The Notice includes required content.

Michael Flanagan
Signature

UTILITIES ADMINISTRATOR
Title

WSSN: 2310

3/2/15
Date Sent to Consumer

Reminder to water supplier: Complete this certification on only one (1) example copy of a notice sent to a consumer and submit it to the DEQ.

Rosenthal, Adam (DEQ)

From: Rosenthal, Adam (DEQ)
Sent: Monday, August 03, 2015 9:57 AM
To: 'Michael Glasgow'
Subject: RE: PbCu Cert form

Morning Mike, I also need copies of all 68 consumer notices. I have 1 from 401 E. Newall St., so 67 more.

thanks,

Adam Rosenthal, EQA
 MDEQ – Office of Drinking Water and Municipal Assistance
 Lansing District – Constitution Hall 1SW
 PO Box 30242
 Lansing, MI 48909
 517-284-6644
 fax: 517-241-3571

For MORs, Lab Results & Reporting Forms:
DEQ-DWMA-Lansing@michigan.gov

From: Michael Glasgow [<mailto:mglasgow@cityofflint.com>]
Sent: Friday, July 31, 2015 10:28 AM
To: Rosenthal, Adam (DEQ)
Subject: Re: PbCu Cert form

Adam,

Here is the lead & copper report. I have also sent a hard copy out via USPS.

On Thu, Jul 30, 2015 at 9:33 AM, Rosenthal, Adam (DEQ) <ROSENTHALA@michigan.gov> wrote:

Morning Mike, I'm preparing the 90th percentile letter and I need your lead copper certification form with the cert of notification to the customers. What I have are 68 results that are routine from 1/1 – 6/30/15. The link below is for the form if you don't have one.

http://www.michigan.gov/deq/0,4561,7-135-3313_3675_3691-61640--,00.html

thanks,

Adam Rosenthal, EQA

MDEQ – Office of Drinking Water and Municipal Assistance

Lansing District – Constitution Hall 1SW

PO Box 30242

Lansing, MI 48909

517-284-6644

fax: 517-241-3571

For MORs, Lab Results & Reporting Forms:

DEQ-DWMA-Lansing@michigan.gov

--

Mike Glasgow
Utilities Administrator
City of Flint
1101 S. Saginaw St.
Flint, MI 48502
(810)766-7135 ext. 2602

Rosenthal, Adam (DEQ)

From: Rosenthal, Adam (DEQ)
Sent: Friday, July 10, 2015 11:28 AM
To: 'Michael Glasgow'
Cc: Brent Wright
Subject: RE: lead/copper

we are discussing options regarding this and future rounds of monitoring and will get back with you.

thanks,

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 MDEQ – Office of Drinking Water and Municipal Assistance
 Lansing District – Constitution Hall 1SW
 PO Box 30242
 Lansing, MI 48909
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From: Michael Glasgow [<mailto:mglasgow@cityofflint.com>]
Sent: Thursday, July 09, 2015 2:19 PM
To: Rosenthal, Adam (DEQ)
Cc: Brent Wright
Subject: Re: lead/copper

Adam,

I just sent the last of the samples to the lab today. Unfortunately we did not reach 100 samples. I believe the count I have is 76 total. Since we have had a few more hits this round, we are going to continue to solicit samples for our own informational purposes. I am disappointed in the turnout of sampling, we distributed close to 200 sample bottles. With this monitoring violation will we be required to collect another round of 100 samples?

Also, I have attached a copy of our June bromate test results.

On Thu, Jul 9, 2015 at 9:55 AM, Rosenthal, Adam (DEQ) <ROSENTHALA@michigan.gov> wrote:

Morning Mike, do you have a count on how many lead/copper samples were turned in? I know they all haven't been run at the lab yet, but if I can verify how many there will be, that would be good. So far I have 70 results and the City is below the AL for lead – current 90th = 13 ppb. All the copper results are below.

thanks,

Adam Rosenthal, EQA

MDEQ – Office of Drinking Water and Municipal Assistance

Lansing District – Constitution Hall 1SW

PO Box 30242

Lansing, MI 48909

517-284-6644

fax: 517-241-3571

For MORs, Lab Results & Reporting Forms:

DEQ-DWMA-Lansing@michigan.gov

—
Mike Glasgow
Utilities Administrator
City of Flint
1101 S. Saginaw St.
Flint, MI 48502
(810)766-7135 ext. 2602

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
**LEAD AND COPPER REPORT AND
CONSUMER NOTICE OF LEAD RESULT
CERTIFICATE FOR COMMUNITY WATER SUPPLY**



Issued under authority of 1976 PA 399, MCL 325.1001 *et al.*, and Administrative Rules, as amended.
Failure to submit this information is a violation of Act 399 and may subject the water supply to enforcement penalties.

Administrative Rule R 325.10710d requires water supplies to report lead and copper monitoring information within 10 days after the end of the monitoring period. This form may be used to meet this requirement. Submit the information to the appropriate Department of Environmental Quality (DEQ) district office. For district office addresses, visit www.michigan.gov/deq and click on Locations.

1. Water Supply Name: City of Flint Water Plant
2. County: Genesee 3. WSSN: 2310
4. Population: 99,763 5. Monitoring Period: From: 1/1/15 To: 6/30/15
6. Minimum # of Samples Required: 60 7. # of Samples Taken: 69
8. Name of Certified Laboratory: DEQ Drinking Water Laboratory

9. SAMPLE CRITERIA:

Yes	No	Explain No responses in Comments block.
☐	☒	a. Are the same sampling points used as in the previous monitoring period?
☐	☒	b. Are all samples from Tier 1 sites?
☒	☐	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?
☒	☐	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the system?
☒	☐	e. Is the minimum number of lead service line samples taken (when applicable)?

For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

Comments: Revised report after conference call with DEQ staff. Two samples were removed from list for not meeting sample criteria, and due to population the number of samples required was reduced to 60.

10. NAME:

Name: Michael Glasgow

Title: Utilities Administrator Phone: 810-766-7135 Date: 8/20/2015

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumbing ²	Lead (ppb)	Copper (ppb)	Lab #
2205 Flusing Rd	2/15/15	1	L	C,P	N.D.	0.13	54663
1809 Stevenson St.	2/10/15	1	L	P	10	N.D.	54956
4202 Custer Ave.	3/4/15	1	L	C,P	6	0.27	56223
401 E. Newall St.	3/2/15	1	L	P	5	N.D.	56225
215 Browning Ave.	3/21/15	1	L	C,P	N.D.	0.16	56226
2615 Trumbull Ave.	2/27/15	1	L	C,P	3	N.D.	56227
201 Browning Ave.	3/5/15	1	L	P	N.D.	N.D.	56228
1224 Decker St.	3/17/15	1	L	C,P	13	0.10	57728
1220 Decker St.	3/17/15	1	L	P	4	N.D.	57730
1379 Washington Ave.	3/19/15	1	L	P	8	N.D.	57731
1383 Washington Ave.	3/19/15	1	L	C,P	6	0.17	57734
1372 Washington Ave.	3/19/15	1	L	C,P	2	0.14	57733
1367 Washington Ave.	3/17/15	1	L	P	1	N.D.	57735
1701 Marquette Dr.	3/14/15	1	L	C,P	1	0.19	57736
778 Bundy Ave.	3/24/15	1	L	P	N.D.	N.D.	58413
3714 Beecher Rd.	3/24/15	1	L	C	2	0.52	58414
1016 Ingleside Ave.	4/9/15	1	L	C,P	7	0.07	59749
1818 Rock Creek Ln.	4/6/15	1	L	C,P	3	0.11	59750
3010 Cheyenne St.	4/3/15	1	L	C,P	5	0.10	59751
2606 Mountain Ave.	4/15/2015	1	L	P	N.D.	N.D.	60546

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumbing ²	Lead (ppb)	Copper (ppb)	Lab #
2020 Crooked Ln.	4/24/15	1	L	C,P	5	0.10	61845
310 E. Moore St.	4/22/15	1	L	P	5	N.D.	61846
631 Alvord Ave.	5/6/15	1	L	P	42	N.D.	63410
216 Browning Ave.	5/7/15	1	L	C,P	22	0.31	63411
3714 Beecher Rd.	5/14/15	1	L	C,P	8	0.15	64283
912 Lexington Ave.	5/15/15	1	L	P	6	N.D.	64285
349 Robbie Ln.	5/31/15	1	L	P	2	N.D.	67428
353 Robbie Ln.	5/30/15	1	L	C,P	5	0.11	67427
341 Robbie Ln.	5/31/15	1	L	C,P	3	0.05	67426
328 Robbie Ln.	5/30/15	1	L	C,P	2	0.09	67425
357 Robbie Ln.	5/31/15	1	L	C	3	0.20	67424
344 Robbie Ln.	5/31/15	1	L	C,P	4	0.11	67423
1807 Oren Ave.	6/8/15	1	L	P	21	N.D.	68023
421 Lyon St.	6/14/15	1	L	C,P	7	0.14	68788
1528 Delaware Ave.	6/12/15	1	L	P	3	N.D.	68789
3811 Brentwood Dr.	6/14/15	1	L	P	42	N.D.	68790
1615 S. Franklin Ave.	6/14/15	1	L	P	N.D.	N.D.	68791
853 E. 7th St.	6/12/15	1	L	C,P	7	0.07	68792
1150 Woodside Dr.	6/14/15	1	L	P	29	N.D.	68793
547 Copeman Blvd.	6/15/14	1	L	P	18	N.D.	68794

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumbing ²	Lead (ppb)	Copper (ppb)	Lab #
2114 Flushing Rd.	6/30/15	1	L	P	5	0.05	71170
709 Frost St.	6/30/15	1	L	P	2	N.D.	72033
920 Stocker Ave.	6/21/15	1	L	P	1	N.D.	69622
742 Lincoln Ave.	6/19/15	1	L	P	2	N.D.	69623
3517 Bennett Ave.	6/24/15	1	L	C,P	3	0.06	69624
1730 Overhill Dr.	6/22/15	1	L	C,P	1	0.08	69625
2117 Stanford Ave.	6/23/15	1	L	C,P	5	0.08	69626
2432 Beta Ln.	6/21/15	1	L	P	N.D.	N.D.	69627
2023 Miller Rd.	6/21/15	1	L	C,P	3	0.06	69628
721 East St. Apt #2	6/25/15	4	L	C,P	10	0.16	70222
3814 Whitter	6/25/15	1	L	P	2	N.D.	70223
3120 Norwood	6/24/15	1	L	P	5	N.D.	70224
2122 Pierce St.	6/21/15	1	L	P	2	N.D.	70225
3521 Bennett Ave.	6/25/15	1	L	P	3	N.D.	70226
1602 Raspberry Ln.	6/24/15	1	L	P	N.D.	N.D.	70227
1809 Lynbrook	6/26/15	1	L	P	3	N.D.	70228
2112 Sherff	6/24/15	1	L	C,P	9	0.06	70229
1205 Blanchard Ave.	6/24/15	1	L	C,P	11	0.05	70230
860 Schafer St.	6/26/15	1	L	C,P	N.D.	0.06	70231
2110 Flushing Rd.	6/30/15	1	L	C	N.D.	0.10	71158

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumbing ²	Lead (ppb)	Copper (ppb)	Lab #
2300 Flushing Rd.	6/29/15	1	L	C	3	0.28	71159
2130 Flushing Rd.	6/28/15	1	L	C,P	6	0.05	71160
2202 Flushing Rd.	6/29/15	1	L	C,P	2	0.06	71162
2429 Flushing Rd.	6/30/15	1	L	C,P	N.D.	0.06	71163
4013 Brownell Blvd.	6/29/15	1	L	C,P	2	0.08	71165
2414 Flushing Rd.	6/30/15	1	L	P	N.D.	N.D.	71166
1914 Penbrook Ln	6/29/15	1	L	P	2	N.D.	71167
3901 Leedra St.	6/26/15	1	L	P	N.D.	N.D.	71168
3142 McClure	6/26/15	1	L	P	3	N.D.	71169

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
**LEAD AND COPPER REPORT AND
CONSUMER NOTICE OF LEAD RESULT
CERTIFICATE FOR COMMUNITY WATER SUPPLY**



Issued under authority of 1976 PA 399, MCL 325.1001 *et al.*, and Administrative Rules, as amended.
Failure to submit this information is a violation of Act 399 and may subject the water supply to enforcement penalties.

Administrative Rule R 325.10710d requires water supplies to report lead and copper monitoring information within 10 days after the end of the monitoring period. This form may be used to meet this requirement. Submit the information to the appropriate Department of Environmental Quality (DEQ) district office. For district office addresses, visit www.michigan.gov/deq and click on Locations.

1. Water Supply Name: City of Flint Water Plant
2. County: Genesee 3. WSSN: 2310
4. Population: 99,763 5. Monitoring Period: From: 1/1/15 To: 6/30/15
6. Minimum # of Samples Required: 100 7. # of Samples Taken: 71
8. Name of Certified Laboratory: DEQ Drinking Water Laboratory

9. SAMPLE CRITERIA:

Yes	No	Explain No responses in Comments block.
☐	☒	a. Are the same sampling points used as in the previous monitoring period?
☐	☒	b. Are all samples from Tier 1 sites?
☒	☐	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?
☒	☐	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the system?
☒	☐	e. Is the minimum number of lead service line samples taken (when applicable)?

For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

Comments:
A total of 175 sample bottles and instructions were distributed to city residents. We are continuing to solicit samples due to the fact that we did not reach the minimum number for this monitoring period.

10. NAME:

Name: Michael Glasgow
Title: Utilities Administrator Phone: 810-766-7135 Date: 7/28/2015

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumb-ing ²	Lead (ppb)	Copper (ppb)	Lab #
2205 Flusing Rd	2/15/15	1	L	C,P	N.D.	0.13	54663
212 Browning Ave.	2/18/15	1	L	P	104	N.D.	54945
1809 Stevenson St.	2/10/15	1	L	P	10	N.D.	54956
4202 Custer Ave.	3/4/15	1	L	C,P	6	0.27	56223
401 E. Newall St.	3/2/15	1	L	P	5	N.D.	56225
215 Browning Ave.	3/21/15	1	L	C,P	N.D.	0.16	56226
2615 Trumbull Ave.	2/27/15	1	L	C,P	3	N.D.	56227
201 Browning Ave.	3/5/15	1	L	P	N.D.	N.D.	56228
1224 Decker St.	3/17/15	1	L	C,P	13	0.10	57728
1220 Decker St.	3/17/15	1	L	P	4	N.D.	57730
1379 Washington Ave.	3/19/15	1	L	P	8	N.D.	57731
1383 Washington Ave.	3/19/15	1	L	C,P	6	0.17	57734
1372 Washington Ave.	3/19/15	1	L	C,P	2	0.14	57733
1367 Washington Ave.	3/17/15	1	L	P	1	N.D.	57735
1701 Marquette Dr.	3/14/15	1	L	C,P	1	0.19	57736
778 Bundy Ave.	3/24/15	1	L	P	N.D.	N.D.	58413
3714 Beecher Rd.	3/24/15	1	L	C	2	0.52	58414
1016 Ingleside Ave.	4/9/15	1	L	C,P	7	0.07	59749
1818 Rock Creek Ln.	4/6/15	1	L	C,P	3	0.11	59750
3010 Cheyenne St.	4/3/15	1	L	C,P	5	0.10	59751

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water PlantWSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumbing ²	Lead (ppb)	Copper (ppb)	Lab #
2606 Mountain Ave.	4/15/15	1	L	P	N.D.	N.D.	60546
2020 Crooked Ln.	4/24/15	1	L	C,P	5	0.10	61845
310 E. Moore St.	4/22/15	1	L	P	5	N.D.	61846
631 Alvord Ave.	5/6/15	1	L	P	42	N.D.	63410
216 Browning Ave.	5/7/15	1	L	C,P	22	0.31	63411
3714 Beecher Rd.	5/14/15	1	L	C,P	8	0.15	64283
625 S. Grand Traverse	5/18/15	5	L	C,P	20	0.14	64284
912 Lexington Ave.	5/15/15	1	L	P	6	N.D.	64285
349 Robbie Ln.	5/31/15	1	L	P	2	N.D.	67428
353 Robbie Ln.	5/30/15	1	L	C,P	5	0.11	67427
341 Robbie Ln.	5/31/15	1	L	C,P	3	0.05	67426
328 Robbie Ln.	5/30/15	1	L	C,P	2	0.09	67425
357 Robbie Ln.	5/31/15	1	L	C	3	0.20	67424
344 Robbie Ln.	5/31/15	1	L	C,P	4	0.11	67423
1807 Oren Ave.	6/8/15	1	L	P	21	N.D.	68023
421 Lyon St.	6/14/15	1	L	C,P	7	0.14	68788
1528 Delaware Ave.	6/12/15	1	L	P	3	N.D.	68789
3811 Brentwood Dr.	6/14/15	1	L	P	42	N.D.	68790
1615 S. Franklin Ave.	6/14/15	1	L	P	N.D.	N.D.	68791
853 E. 7 th St.	6/12/15	1	L	C,P	7	0.07	68792

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

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TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water Plant

WSSN 2310

RESULTS:

Sample Location	Sample Date	Sample Category ¹	Service Lines ²	Bldg Plumb-ing ²	Lead (ppb)	Copper (ppb)	Lab #
1150 Woodside Dr.	6/14/15	1	L	P	29	N.D.	68793
547 Copeman Blvd.	6/14/15	1	L	P	18	N.D.	68794
920 Stocker Ave.	6/21/15	1	L	P	1	N.D.	69622
742 Lincoln Ave.	6/19/15	1	L	P	2	N.D.	69623
3517 Bennett Ave.	6/24/15	1	L	C,P	3	0.06	69624
1730 Overhill Dr.	6/22/15	1	L	C,P	1	0.08	69625
2117 Stanford Ave.	6/23/15	1	L	C,P	5	0.08	69626
2432 Beta Ln.	6/21/15	1	L	P	N.D.	N.D.	69627
2023 Miller Rd.	6/21/15	1	L	C,P	3	0.06	69628
721 East St. Apt #2	6/25/15	4	L	C,P	10	0.16	70222
3814 Whitter	6/25/15	1	L	P	2	N.D.	70223
3120 Norwood	6/24/15	1	L	P	5	N.D.	70224
2122 Pierce St.	6/21/15	1	L	P	2	N.D.	70225
3521 Bennett Ave.	6/25/15	1	L	P	3	N.D.	70226
1602 Raspberry Ln.	6/24/15	1	L	P	N.D.	N.D.	70227
1809 Lynbrook	6/26/15	1	L	P	3	N.D.	70228
2112 Sherff	6/24/15	1	L	C,P	9	0.06	70229
1205 Blanchard Ave.	6/24/15	1	L	C,P	11	0.05	70230
860 Schafer St.	6/26/15	1	L	C,P	N.D.	0.06	70231
2110 Flushing Rd.	6/30/15	1	L	C	N.D.	0.10	71158

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

² Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

11. TAP SAMPLING DATA: (Use additional sheets as needed)

Water Supply Name/County City of Flint Water Plant

WSSN 2310

RESULTS:

[illegible]

¹ Sample Category: Enter a number 1 through 6 to designate the category of tap sample site. For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

2. Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or P = plastic.

TO BE DETERMINED BY DEQ

	90 th percentile	Ave	Max	# > AL
Pb				
Cu				

Consumer Notice of Lead Result in Drinking Water

Water Supply Name:	City of Flint		
County:	Genesee	WSSN:	2310
Sample Location:	401 E. Newall St.	Date Sampled:	3/2/15

Thank you for participating in the lead and copper monitoring of drinking water. The levels of lead and copper found at your location are in the table below.

Key to Table	Contaminant	AL	MCLG	Your Result
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. Maximum Contaminant Level Goal (MCLG): 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. ppb: parts per billion or micrograms per liter.	Lead (ppb)	15	0	5
	Copper (ppb)	1300	1300	Not Detected

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 it 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.

To reduce exposure to lead in drinking water:

- *Run your water to flush out lead.* Run the water until it becomes cold.
- *Use cold water for cooking and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily in hot water.
- *Do not boil water to remove lead.* Boiling water will not reduce lead levels.
- *Look for alternative sources or treatment of water.* If your lead result is above 15 ppb, 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 NSF International at 800-NSF-8010, or www.nsf.org for information on performance standards for water filters.
- *Identify if your plumbing fixtures contain lead.* New faucets, fittings, and valves, may contain up to 8 percent lead including those advertised or labeled as "lead-free" and may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Although the primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil, the U.S. EPA estimates that 10 to 20 percent of human exposure to lead may come from drinking water.

For more information, contact us at: City of Flint Water Plant (810) 787-6537
 For more information on reducing lead exposure around your home and the health effects of lead, visit the U.S. EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

Certification:

I certify that this public water supply has provided the consumer notice of lead result to persons served at each of the taps that was tested, either by mail or by another method approved by the DEQ, within 30 days of knowing the result. The Notice includes required content.

	UTILITIES ADMINISTRATOR	3/17/15	Date Sent to Consumer
Signature	Title		

Reminder to water supplier: Complete this certification on only one (1) example copy of a notice sent to a consumer and submit it to the DEQ.

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**



USEPA Region V Drinking Water Cert. No. MI00003
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562

**Sample Number
LF58413**

Official Laboratory Report

Report To: MIKE GLASGOW
4500 N DORT HWY
FLINT MI 48505

System Name/Owner: CITY OF FLINT
Collection Address: 778 E BUNDY AVE, FLINT
Collected By: SANDRA HULL
Township/Well#/Section: //
County: Genesee
Sample Point: MAIN BATHROOM
Water System: Treated Public Distribution System

WSSN/Pool ID: 2310
Source: TYPE I
Site Code:
Collector: Private Citizen
Date Collected: 03/24/2015 06:25
Date Received: 03/31/2015 11:11
Purpose: Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	Not detected	04/01/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	Not detected	04/01/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

Genesee County Health Dept.
630 South Saginaw
Flint, MI 48502-1540
810 257-3603

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Kriszlian