



March 21, 2019

City of Milwaukee Common Council
200 E. Wells Street, Room 205
Milwaukee, WI 53202

Re: File 181610

Dear Honorable Members of the City of Milwaukee Common Council:

This letter serves to address our concerns about statements that were made at the February 14, 2019 meeting of the Steering and Rules Committee relative to Communication File [181610](#). This file pertains to the City's ongoing lead challenges, and testimony was provided to the Committee by representatives of the Freshwater for Life Action Coalition (FLAC) and the Get the Lead Out Coalition (GTLO).

We appreciate the substantive questions raised by Committee members. Likewise, we appreciate the full Common Council's efforts to raise awareness on these issues and seek resolutions to our ongoing challenges. We are, however, concerned about a number of statements that were made at the meeting. Unfortunately, some information presented during the discussion may have resulted in confusion and misunderstandings among Council members and the general public because it was not factual or based on a current understanding of science. Our concerns follow:

Relationship between Infant Mortality and Lead Poisoning: The FLAC/GTLO representatives stated that, over a five year period (2012-2016), there were between 40-49.99 infant deaths within 1 or 2 blocks on either side of a stretch of North Ave in the 15th Aldermanic District. We regret that families who have experienced the tragedy of an infant death have been brought into this debate.

The legend on the map in question indicated that the area colored deep red had "40-49.9 infant deaths per square mile." This does not mean that there were 40.00-49.99 deaths *within the red area*, which is how these maps have been interpreted. Instead, it means that if you were to draw a one square mile circle from any point within the red area – an area far bigger than the deep red part of the map – there were between 40 and 49.9 infant deaths over the five-year time period within that square mile. This is further illustrated in Attachment A. The map does show that there is a higher density of infant mortality in this broad area of the city compared to other areas, but it is not specific to a few blocks along North Avenue.

The FLAC/GTLO representatives also made a false claim that water main repairs caused infant deaths, specifically along North Ave in 15th Aldermanic District. The statement falsely associated infant deaths over a 5-year period (2012-2016) with water main repairs along North Avenue over a two-year period in 2008 and 2009.



The section of West North Avenue for which FLAC/GTLO contends partial lead service line replacements are responsible for infant deaths between 2012 to 2016 was subject to a water main replacement project over a two-year period in 2008 and 2009, with final completion date of May 29, 2009. Data suggest lead in water may increase immediately following, but decreases to preconstruction levels approximately 30 days following a water main replacement project. Data collected by Milwaukee Water Works (MWW) through a 2015 and 2016 study shows that lead levels reduce to preconstruction levels within 30 days following a water main replacement or other construction project. The North Avenue main replacement project completed in 2009 would not affect drinking water three years after completion, and therefore it is unreasonable to assume the main replacement project would affect lead levels in drinking water at residences in the area.

Additional correspondence was received from FLAC/GTLO requesting information on main breaks from May 17 to May 27, 2014. MWW experienced an unusually high number of main breaks during this period due to a temporary shutdown of the Howard Plant on the south side of the city, resulting in the need for increased pressure from the pumping stations near the Linnwood Plant to serve the southern areas. The increase in pressure caused 89 main breaks over the eleven days (although reported by media outlets as 92, MWW confirmed 89 main breaks). Five of the 89 main breaks (5.6%) were within ½-mile of the area of West North Avenue shown within the red area on the map. The five main breaks and subsequent repair work cannot be correlated with an increased risk compared to other portions of the city. To infer residents in this area were at a greater risk due to the main breaks than any other area of the city also subject to an increase in main breaks is inherently false. Based on the false logic of FLAC/GTLO, 89 water main breaks should have resulted in an elevated risk for infant mortality across wide areas of the city, something that was not actually seen.

MWW implemented corrosion control treatment in 1996 to reduce lead levels in drinking water and has been in compliance with the Environmental Protection Agency's Lead and Copper Rule since 1997. Additionally, since 2002, the Wisconsin Department of Natural Resources (WDNR) has categorized MWW corrosion control as "optimized," which is defined as the best water conditions for minimizing lead concentrations in water. MWW continues to comply with the Lead and Copper Rule and utilizes resources to ensure best practices for corrosion control are followed.

Milwaukee County Medical Examiner Dr. Brian Peterson further addressed the relationship between lead poisoning and infant deaths in an April 26, 2018 email (Attachment B), writing: "As I have mentioned previously, there has not been a single infant death in Milwaukee County in the past decade caused by acute lead poisoning."

More broadly, evidence linking lead poisoning to infant deaths is lacking. We do have data about many other factors that contribute to infant mortality, and we know that the primary drivers of infant mortality in Milwaukee, and elsewhere, are complications of preterm birth, deaths associated with unsafe sleep environments, and congenital anomalies (birth defects).

While there is evidence that high-level lead exposure to pregnant women – occupational exposure, for example – increases the risk of preterm birth, the results of studies looking at lower-level, community exposures are inconsistent at best. Moreover, we are aware of no significant study showing any link between lead exposure once a preterm baby is born and that infant's subsequent death. Obviously there are a host of other serious consequences of even low-level lead exposure to infants, including both from direct exposures and from maternal exposures, but infant death does not appear to be one of them.

FLAC and the GTLO further stated that the Milwaukee County Medical Examiner does not test for lead poisoning during autopsies, so there is no way to know if lead was the cause of infant deaths. According to the

Milwaukee County Medical Examiner, Dr. Brian Peterson, there is no evidence that lead poisoning has contributed to any specific infant's death in Milwaukee County, including over the time period in question. Dr. Peterson addressed this issue on April 26, 2018 (Attachment B).

Lead poisoning is associated with signs and symptoms; we have never seen such signs and have had no reports of such symptoms in this group of infant deaths. This is simply not an issue, and raising irresponsible allegations does not make it an issue. ... [The] Medical Examiner's Office is only interested in accurately and efficiently determining cause and manner of death in all of our cases, and in serving the people of Milwaukee County with compassion and efficiency, regardless of zip code. Were lead poisoning to be an issue, and were such poisoning to cause death in any group, we would be the first to discover and report it.

Changes to Lead Poisoning Maps: A FLAC/GTLO representative falsely asserted that City officials altered maps to make lead poisoning seem like a less serious issue. The City of Milwaukee Health Department developed these maps to better understand how childhood lead poisoning is distributed across the city. The health department takes seriously its responsibility in communicating health data effectively and works with experts in the City of Milwaukee's Information Technology and Management Division (ITMD) to develop most of the maps that include health data. The department does this for two reasons. First, ITMD employs several staff who have extensive expertise and experience in the software used to develop the maps (ArcGIS). Second, this approach removes potential bias from the map making process by having someone with limited knowledge of the health information – and no incentive to paint a particular picture – develop the maps. We work closely with ITMD to make sure the maps meet the intent of why they were created, in this case to highlight that childhood lead poisoning isn't distributed equally across the city.

The legend was indeed changed between two sets of maps (Dated 2/14/2018 & 4/6/2018), because the scale of the map needed to be changed. The first map, which had a published scale reading only from "Low" to "High," was subsequently determined to be at risk for violating Federal Health Insurance Portability and Accountability (HIPAA) regulations. Because the "low" end of the scale included areas of the city with less than 5-10 lead-poisoned children per square mile, the map potentially revealed the locations of some lead-poisoned children. The subsequent amended map adjusted the lowest density category, thus assuring that the map would be compliant with Federal privacy requirements (i.e. HIPAA).

In addition, the MHD felt that the map would be more transparent, and more useful to policy-makers and the general public, if the legend included a specific numerical scale, not just a vague "Low-to-high" scale. So, the subsequent map shows the exact density descriptions of each of the four colors on that map in terms of number of lead-poisoned children under six per square mile: a) 10-49.9, b) 50-99.9, c) 100-199.9, and d) 200+.

These cutoffs were different than the between-color cutoffs on the first map, but that was done simply to make the categories more meaningful by making the category breaks occur on easy-to-understand "round numbers" (10, 50, 100, and 200). The underlying data were not changed in any way when the second map was created, nor was there any attempt or desire to make it seem like lead poisoning was a less serious issue. The number and density of lead poisoned children in Milwaukee are accurately represented in each set of maps.

Moreover, the MHD has made available, to the Council and the public, density maps showing the significant decrease in lead poisoning density between 2004 and 2016. These two maps each use the exact same scale, and therefore are completely comparable. These show conclusively that lead poisoning rates decreased dramatically during a time period when there was significant lead paint remediation activity but no significant changes in water treatment and no significant removal of lead service lines. This is one of several examples of

local data confirming that the primary driver or lead poisoning for children in Milwaukee remains deteriorating lead-based paint.

HIPAA: A statement was made saying that City of Milwaukee officials broke Federal Health Insurance Portability and Accountability (HIPAA) regulations by changing the legends on the maps.

Protecting the health information of our community is a top priority for the City of Milwaukee Health Department. After the first set of lead poisoning density maps was developed and distributed, the health department became concerned that there could *potentially* be identifiable information in areas with low densities of lead poisoning. Based on consultation from several ArcGIS experts, our HIPAA Privacy Officer, and other colleagues, the MHD decided to re-create the maps removing the lowest level of the legend from view. This improvement in the map legend did not alter the data in any way. Instead, the map should be interpreted that all other areas of the map (uncolored, or light gray) have some low (but not necessarily zero) density of childhood lead poisoning cases.

The Health Department follows HIPAA privacy best practices, and we have the responsibility and the legal obligation to protect individual health information, as well as the authority to determine which data are appropriate to distribute. We would rather err on the side of caution than potentially release information that is identifiable, thereby sacrificing child and family privacy.

Lead Service Lines: FLAC/GTLO falsely stated that new homes built on vacant lots are connected to old lead service lines. MWW does not allow newly constructed homes to reconnect to unused lead service lines that exist on vacant lots.

As part of the razing process that creates a vacant lot, the service line that served the demolished house is abandoned. When new construction occurs on a vacant lot, the builder is required to provide a new water service line unless the water service pipe from the water main to the curb stop is copper and of the proper size per current specifications. Since 1962, the MWW Water Service Piping Specifications has required that copper pipes be used for new water service lines from the water main to a newly-built house. As of 1985, reconnection to an existing lead service line is NOT allowed. Plumbing inspectors verify that the proper material has been used.

Milwaukee Water Works Rules and Regulations Governing Water Service, Section 3.2.0 Existing Water Service Piping, 3.2.1: Use of Existing Water Service Piping for New Customers states, “water can be supplied through existing water service piping, provided such piping conforms to the current specifications for the water service piping.” FLAC/GTLO repeatedly misquote this sentence by removing the conditioning clause that notes the piping must conform to the current specifications (i.e. copper). *Milwaukee Water Works Water Service Piping Specifications, Chapter 2: Materials, Section 2.1.3: Copper Water Service Piping* state, “copper piping shall be used in all new water service piping installations two (2) inches or smaller.”

Further, *Milwaukee Water Works Rules and Regulations Governing Water Service, Section 3.2.0: Existing Water Service Piping, 3.2.2: Unused Service Piping* states, “unused lead service piping shall not be connected or reconnected.” *Milwaukee Water Works Water Service Piping Specifications, Chapter 2: Materials, Section 2.1.4: Lead Water Service Piping* states, “lead piping shall not be used.”

The Department of City Development’s [website](#) marketing vacant lots for new construction advises buyers to budget “\$8,000 to \$12,000 for sewer and water lateral connections to city utilities in the street.” Over the past decade, the majority of new homes built on vacant lots purchased from the City of Milwaukee have been

developed by Habitat for Humanity (approximately 200 new houses) and Gorman and Company (approximately 110 new houses). In emails to the Department of City Development, both developers have confirmed that they always provide a new copper water service line from the main to the new house.

FLAC/GTLO also stated that the City is poisoning children by only partially replacing lead water service lines (the utility-owned portion) with copper piping. MWW does not partially replace lead service lines and has not partially replaced lead service lines since enacting changes to the Milwaukee Code of Ordinances (MCO) Chapter 225-22.5, effective January 1, 2017. In 2015 and 2016, MWW underwent a [pilot study](#) of the effects of partial replacements of lead service lines in collaboration with MHD. The study indicated such disruptions to the service line may increase lead concentrations immediately (for a period of up to 30 days) following a partial replacement. Based on these results, MWW suspended replacement projects for water mains that were connected to lead service lines in 2016. Following enactment of MCO 225-22.5 in January 2017, replacement projects for water mains connected to lead service lines include full replacement of both the utility- and the privately-owned portions of the lead service lines.

Milwaukee Code of Ordinances Chapter 225: Plumbing and Drainage, Subchapter 2: Sewerage Disposal and Water Systems, Section 22.5: Lead Service Line Replacement dictates that the “privately-owned portion of a lead water service line shall be replaced whenever any of the following occurs: (a) a leak or failure has been discovered on either the privately-owned or utility-owned portion of the service line. (b) the utility-owned portion of the line is replaced on either a planned or emergency basis. (c) the property is a child care facility.”

The FLAC/GTLO representatives falsely stated that the City is not addressing the issue of lead service lines. Milwaukee Code of Ordinances (MCO) Section 225-22.5 requires full replacement of the lead service line when a leak or failure has been detected in the service line, when the utility-owned portion of the service line is required to be replaced, and for all child care facilities. In these instances, the City has provided financial relief to certain property owners to lessen the burden of the mandated replacement. MCO Section 225-22.5 (9) provides criteria for a City Subsidy for the cost of replacing the privately-owned portion of the lead service line, effectively limiting the cost to the property owner of a one- to four-family dwelling or child care facility to \$1,600.

MWW will also coordinate the utility-side lead service line replacement with a property owner to lessen the burden and increase efficiency when the property owner elects to replace the lead service line. In this case, MWW covers the cost of replacement of the utility-owned portion and the property owner is responsible for the cost of replacing the privately-owned portion of the lead service line. MWW is currently exploring opportunities presented by changes to State law that would allow MWW to petition the Public Service Commission to use rate payer funding for grants to offset the cost to the property owner when they elect to replace their lead service line.

City Owned Properties: During the February 14, 2019 Steering and Rules Committee meeting, a statement was made claiming that families who live in City-owned properties are at greater risk for lead poisoning. The claim misinterprets the [lead evaluation plan](#) for occupied City-owned residential properties, presented to the Common Council in July 2018.

The plan states that, when a household includes children under the age of six and/or pregnant women, that household is more vulnerable to lead risk than a household that does not include those population groups. Information from the Health Department, quoted in the plan, explains why:

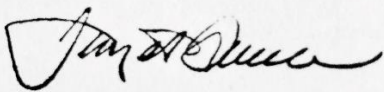
Children under the age of 6 years old are especially vulnerable to lead poisoning because their growing bodies absorb more lead than adults, and their brains and nervous systems are more sensitive to the damaging effects of lead. Babies and young children can also be more highly exposed to lead because they often put their hands and other objects that have lead from dust or soil into their mouths. Adults can also be exposed to lead. Lead exposure for pregnant women is a particular concern because it can result in exposure to her developing baby.

There is no evidence that City property ownership has any impact on the lead risks faced by vulnerable population groups. Nor is there any assertion within the lead evaluation plan that properties owned by the City are any more hazardous than privately-owned properties.

Conclusion: There is one point upon which the City of Milwaukee and FLAC/GTLO strongly agree: Childhood lead poisoning is an extremely serious issue, and we should not rest until it has been eliminated. We also agree that there are multiple sources of lead exposure for children, and that no source of lead exposure is safe. The City is working appropriately, and diligently, to remove lead service lines, and to provide filters to vulnerable people who may be at risk for exposure to lead in water.

We affirm our commitment to providing every child in our city who has been harmed by lead with the services they need and preventing lead poisoning in our city. We look forward to answering your questions at the March 22, 2019 Public Safety and Health Committee meeting.

Sincerely,



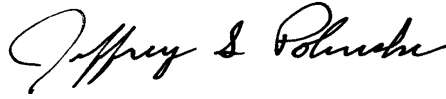
Jeanette Kowalik, PhD, MPH, MCHES
Commissioner
Health Department



Karen Dettmer, P.E.
Superintendent
Milwaukee Water Works



Tom Mishefske
Commissioner
Department of Neighborhood Services

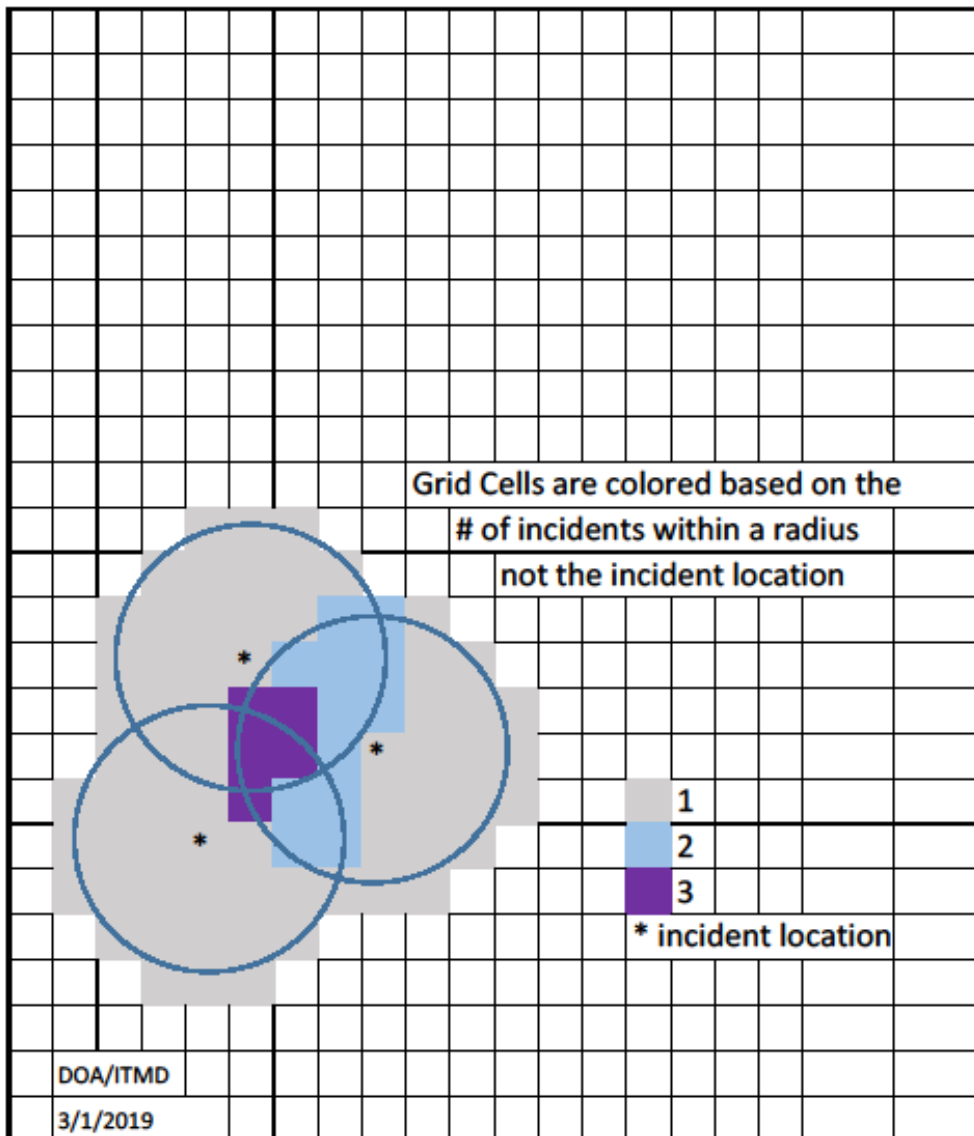


Jeffery S. Polenske, P.E.
Commissioner
Department of Public Works



Rocky Marcoux
Commissioner
Department of City Development

Attachment A: How to Interpret Density Maps



Attachment B: Email Exchange between Dr. Brian Peterson and Various City Employees

From: Peterson, Brian <Brian.Peterson@milwaukeecountywi.gov>
Sent: Thursday, April 26, 2018 11:48:37 AM
To: Stamper II, Russell; Domagalski, Karen
Cc: Gonda, Jennifer; McManus, Patricia; Zarate, Sarah; Hamilton, Ashanti; Ellzey, Dameon; Schreiber, Sara; Perez, Jose
Subject: Re: 40-49 infant mortalities between 2012 and 2016 along one stretch of North Ave. - Why?

As I have mentioned previously, there has not been a single infant death in Milwaukee County in the past decade caused by acute lead poisoning. I am not sure how to respond to the FLAC allegation, as disproving a negative is virtually impossible. For example, FLAC could have alleged that each home within Alderman Stamper's district within which an infant died had a television, so, apparently, televisions cause infant deaths in those homes. How could I prove that this was not the case?

Fortunately, with respect to the lead allegation, we do have science. Lead poisoning is associated with signs and symptoms; we have never seen such signs and have had no reports of such symptoms in this group of infant deaths. This is simply not an issue, and raising irresponsible allegations does not make it an issue. FLAC may not believe this, but the Medical Examiner's Office is only interested in accurately and efficiently determining cause and manner of death in all of our cases, and in serving the people of Milwaukee County with compassion and efficiency, regardless of zip code. Were lead poisoning to be an issue, and were such poisoning to cause death in any group, we would be the first to discover and report it.

Cordially,

Brian L. Peterson, M.D.
Chief Medical Examiner

On Apr 26, 2018, at 11:38 AM, Stamper II, Russell <Russell.StamperII@milwaukee.gov> wrote:

Dear team:

Enclosed is what I informed you about.

Please read and advise. A statement of clarity, transparency and facts should be issued.

Thanks much,

Alderman Stamper

Sent from my iPhone

Begin forwarded message:

From: "KINGFISHmke.com" <info@kingfishmke.com>
Date: April 26, 2018 at 12:00:47 AM CDT
To: russell.stamper@milwaukee.gov
Subject: 40-49 infant mortalities between 2012 and 2016 along one stretch of North Ave. - Why?
Reply-To: info@kingfishmke.com



40-49 infant mortalities between 2012 and 2016 along one stretch of North Ave. - Why?

Robert Miranda, Freshwater for Life Action Coalition (FLAC) Spokesperson

April 26, 2018

The Freshwater for Life Action Coalition (FLAC) formed to convince city elected officials and the citizens of Milwaukee that lead service laterals were causing lead poisoning for people drinking tap water. We advocate for complete removal of all lead service laterals as well as a campaign of community education to inform people that lead in water is a true risk to their health.

Lead is a potent neurotoxin. It harms brain and body development in developing fetuses and young children. Even the smallest amounts of lead place infants and children at risk. Women of child bearing age may have elevated lead levels and unknowingly lead poison their developing fetus. Mothers of infants may mix infant formula with tap water and unknowingly and irreparably harm their infants. Lead not only causes brain damage, it results in infant mortality.

In recent weeks, Mayor Barrett has blamed lead paint chips as the primary source of lead blood levels rising in our children.

While exposure to lead-based paint hazards can result in acute exposure and immediate elevated blood lead levels, it is likely that other low level, chronic, continuous and CONTROLLABLE environmental exposure - like lead in water - contribute to levels between 5-10 ug/dL which is EQUALLY DELETERIOUS to infants, toddlers, young children and pregnant as well as breast feeding women.

The presence of lead-based paint alone DOES NOT constitute an environmental health threat BUT the presence of lead service lines DOES. (Lead-based paint in good condition - not peeling, chipping or flaking or covering friction services does not pose an adverse health exposure to occupants).

Therefore, the Mayor should be very careful in drawing conclusions that a zip code alone fully explains childhood lead exposure via lead-based paint!

Lead poisons our water when it leaves the main and is exposed to the service lateral that feeds each home its supply of water. These service laterals are made from lead. When the EPA determined that lead service laterals caused lead in water, the Lead and Copper Rule was written. Although substantially outdated, the Lead and Copper Rule directs water testing and minimizing lead exposure through service lateral replacement.

Milwaukee took the cheap way out, choosing corrosion control additives for our drinking water. These additives coat the inside of the pipe. Unfortunately, the additives don't work 100 percent of the time and water samples from neighborhoods like those in Alderman Russell Stamper Jr.'s district show lead in the water. Because no level of lead is acceptable the City has gambled with the health of the people living in Milwaukee neighborhoods.

These lead pipes were installed when running water became a thing in Milwaukee. They are old, and they are fragile. Heavy traffic, industrial pounding and broken water mains can increase the lead in water risk for people drinking tap water from faucets in old homes.

For too long the City of Milwaukee has under-informed the at-risk population of the lead in water risk. Instead, City officials emphasize dangers from lead in paint. And while there is clearly lead in paint, soil and or environment, these same officials have no excuse for not explaining the risks of drinking tap water over the past decades.

Nevertheless, the time to elevate the conversation on lead in water risks as arrived. City officials have released a "heat map" that shows the prevalence of infant mortality in Milwaukee. North Avenue is depicted as a red zone on this map. The map indicates that 40-49 infant mortalities occurred from 2012-2016 between Lloyd Street two blocks to the South and Wright Street two blocks to the North from approximately 30th Street to 46th Street.

Several years ago, North Avenue and its intersections received new walkways, curbs and bicycle lanes. The road was completely removed and replaced. This work disrupted lead service laterals up and down the corridor.

Sadly, improving the business district may have resulted in infant death and lead poisoning for residents of the households in this neighborhood.

Today, FLAC can't prove that this is fact because the identities and addresses of the parents whose children were lead poisoned or lost to infant death are private. However, Mayor Barrett and the Health Department could disprove this correlation and outcome by reporting on the blood lead levels of the residents of this area and the reasons for infant death. Why, in all of the City of Milwaukee, would such a terrible and graphic line of death appear along North Avenue?

In asking questions we should also find out did the families of this neighborhood receive medical care or intervention to make their homes safe? The answer on home safety is clear by driving the area. These homes are saturated in lead paint, have lead service laterals and interior plumbing that places people at risk every time they have a glass of water or boil a pot of noodles.

FLAC will continue to identify and elevate this conversation of lead in water until the leadership of the City of Milwaukee takes bold action to inform the people and correct the conditions through City funded work to right what is wrong.

In Their Own Words:

"In a time of universal deceit, telling the truth is a revolutionary act." George Orwell

KINGFISHmke.com, 101 Truth Dr., Milwaukee, WI 53212

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Sent by info@kingfishmke.com

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