

**COUNTY OF MILWAUKEE**  
INTEROFFICE COMMUNICATION

**DATE:** February 21, 2017

**TO:** Supervisor Mayo, Chair, Transportation, Public Works and Transit Committee

**FROM:** James Tarantino, Economic Development Director, Department of Administrative Services

**SUBJECT:** Informational Report in Response to File #16-484 Related to Lead Poisoning Remediation

**REQUEST**

There is no request at this time; this report is for informational purposes only.

**BACKGROUND**

This Informational Report is in response to County Board File #16-484, "A resolution authorizing the Director of Economic Development, Department of Administrative Services, the Milwaukee County Comptroller, and the Director, Community Business Development Partners, to develop a pilot grant program in the amount of \$1,000,000, and a revolving loan program in the amount of \$5,000,000 to provide financial assistance for the replacement of privately-owned lead laterals, as well as the removal of lead paint in owner-occupied homes, residential non-owner occupied homes, and commercial buildings located north of Highland Avenue, south of North Avenue, west of Dr. Martin Luther King, Jr., Drive, and east of 27th Street."

In addition to the items mentioned in the title of File 16-484, that resolution also stated "the Milwaukee County Board of Supervisors requests the City of Milwaukee to coordinate lateral replacement with residents of the aforementioned area, to ensure full replacement of lead service lines."

**RESEARCH OF LEAD RISK**

The public health issue of lead poisoning risk has been studied by the Center for Disease Control and the National Center for Environmental Health, among others. Lead risk related to lead service laterals and lead paint in homes is a subset of that research, the following is a brief summary of the prevailing scientific thought on lead poisoning prevention.

*Brown ScD, M. J. (2012). Lead in Drinking Water and Human Blood Lead Levels in the United States. Atlanta, GA: Division of Emergency and Environmental Health Services, National Center for Environmental Health.*

[http://www.cdc.gov/mmwr/preview/mmwrhtml/su6104a1.htm?s\\_cid=su6104a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/su6104a1.htm?s_cid=su6104a1_w)

- A 2012 study conducted by the National Center for Environmental Health concluded that "findings imply that the practice of partially replacing lead service lines as a method to comply with LCR should be reconsidered."

- Studies reviewed by these researchers explained that certain water treatment methods, as well as the partial replacement of the public lead side lateral “have been associated with short- term increases in lead levels of drinking water and has not been found to decrease risk for blood lead levels  $\geq 5$   $\mu\text{g}/\text{dL}$  in children.”
- Examination of all sources of lead exposure, including the full replacement of both private and public lead side laterals are an alternative practice cited by the study which may be helpful for a successful lead remediation program.

*Centers for Disease Control (2016, November 28). Lead Tips Sources of Lead Water.*  
<http://www.cdc.gov/nceh/lead/tips/water.htm>

- The Centers for Disease Control (CDC) explains that “[l]ead found in tap water usually comes from the corrosion of older fixtures or from the solder that connects pipes. When water sits in leaded pipes for several hours, lead can leach into the water supply.”
- While this may be cause for concern, the CDC also explains that “[m]ost studies show that exposure to lead-contaminated water alone would not be likely to elevate blood lead levels in most adults, even exposure to water with a lead content close to the EPA action level for lead of 15 parts per billion (ppb).”
- If the water in question does not have levels of lead above the recommended level, then no action is necessary. Based on the data made available to the CDC, full replacement of the lead water lines, by removing the private lines running from the water meter to the residence, have not been adequately studied.

*Centers for Disease Control, N. C. (2016, March 25). Lead, Wisconsin Data, Statistics and Surveillance. Atlanta, Georgia, United States.*  
<http://www.cdc.gov/nceh/lead/data/learnmore.htm>

- In 2015, the Centers for Disease Control tested the blood lead levels in children of Milwaukee County. Of the 30,552 children tested, only 1.3% or 399 children had confirmed elevated blood lead levels  $\geq 10$   $\mu\text{g}/\text{dL}$ . This number has generally declined from 638 children (1.7%) in 2010 and 1,562 (5.7%) in 2005.

*Environmental Protection Agency. (2013, November). Steps to Lead Safe Renovation, Repair, and Painting.*  
[https://www.epa.gov/sites/production/files/2013-11/documents/steps\\_0.pdf](https://www.epa.gov/sites/production/files/2013-11/documents/steps_0.pdf)

- Lead paint is still present in millions of homes, sometimes under layers of newer paint. If the paint is in good shape, the lead paint is usually not a problem. Deteriorating lead-based paint (peeling, chipping, chalking, cracking, damaged, or damp) is a hazard and needs immediate attention.
- Lead dust can also be tracked into the home from soil outside that is contaminated by deteriorated exterior lead-based paint and other lead sources.

*Housing and Urban Development. (2012). Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Edition).*  
<https://www.hud.gov/offices/lead/lbp/hudguidelines/Ch12.pdf>

- HUD Best practice guidelines indicate that lead paint removal is not always the safest option to reduce risk of lead exposure. In most cases, a process of lead paint “enclosure” is the preferred option as it reduces the dust related with full paint removal.

A review of best practice indicates lead risk assessment is the first step in determining the appropriate remediation method. Lead service lateral replacement, soil remediation, and paint control are best practices. Lead paint removal is not always best practice, and in many cases paint enclosure is preferred.

See attached table for greater detail on lead poisoning test results conducted by the Center for Disease Control within Milwaukee.

### **CITY OF MILWAUKEE EFFORTS TO REMEDIATE**

It has been requested by the Board that Milwaukee County aid in the overall strategy to remediate lead poisoning risk within a defined target area wholly within the City of Milwaukee. Prior to identifying that role it is important to understand the City’s approach in an effort to find a niche to aid those efforts. It should also be noted that lead service lateral risk exists in other Milwaukee County municipalities including West Allis, Wauwatosa, and St. Francis and lead poisoning risk exists in older homes regardless of the community.

#### **City of Milwaukee – Childhood Lead Poisoning Prevention Program**

Guiding the City’s efforts is a principle that protecting children from exposure to lead is important to lifelong good health and that no safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention, and academic achievement. Once they have occurred, the effects of lead exposure cannot be corrected.

The City of Milwaukee Health Department (MHD) has been working to reduce lead hazards in the home environment for over 20 years. In those 20-plus years, MHD has worked to make over 18,000 homes lead safe in the City of Milwaukee, primarily by mitigating lead-based paint hazards. In the process, we have substantially reduced the rate of children with elevated blood lead levels (EBLLs). For example, the percent of Milwaukee children aged 0 to 5 with blood lead level tests at or above 10 µ/dL decreased from 31.9% in 1997 to 11.3% in 2003 to 3.1% in 2015. Even with regard to the CDC’s more recent, lower (and therefore more stringent) 5µ/dL level, the percent of Milwaukee children has decreased from 38% in 2003 to 11.6% in 2015.

The City of Milwaukee Health Department’s Childhood Lead Poisoning Prevention Program (CLPPP) operates a Primary Prevention Program to make properties lead safe in Milwaukee. Through this program, eligible property owners are provided a reimbursement to replace original windows that have lead-based paint.

The program targets the city of Milwaukee zip codes where the majority of elevated blood lead levels are reported. These zip codes are: 53204, 53205, 53206, 53208,

53209, 53210, 53212, 53215, 53216. CLPPP target zip codes are outlined in the map below.

To be eligible for the program, a property must be within the above zip codes, built prior to 1950, and:

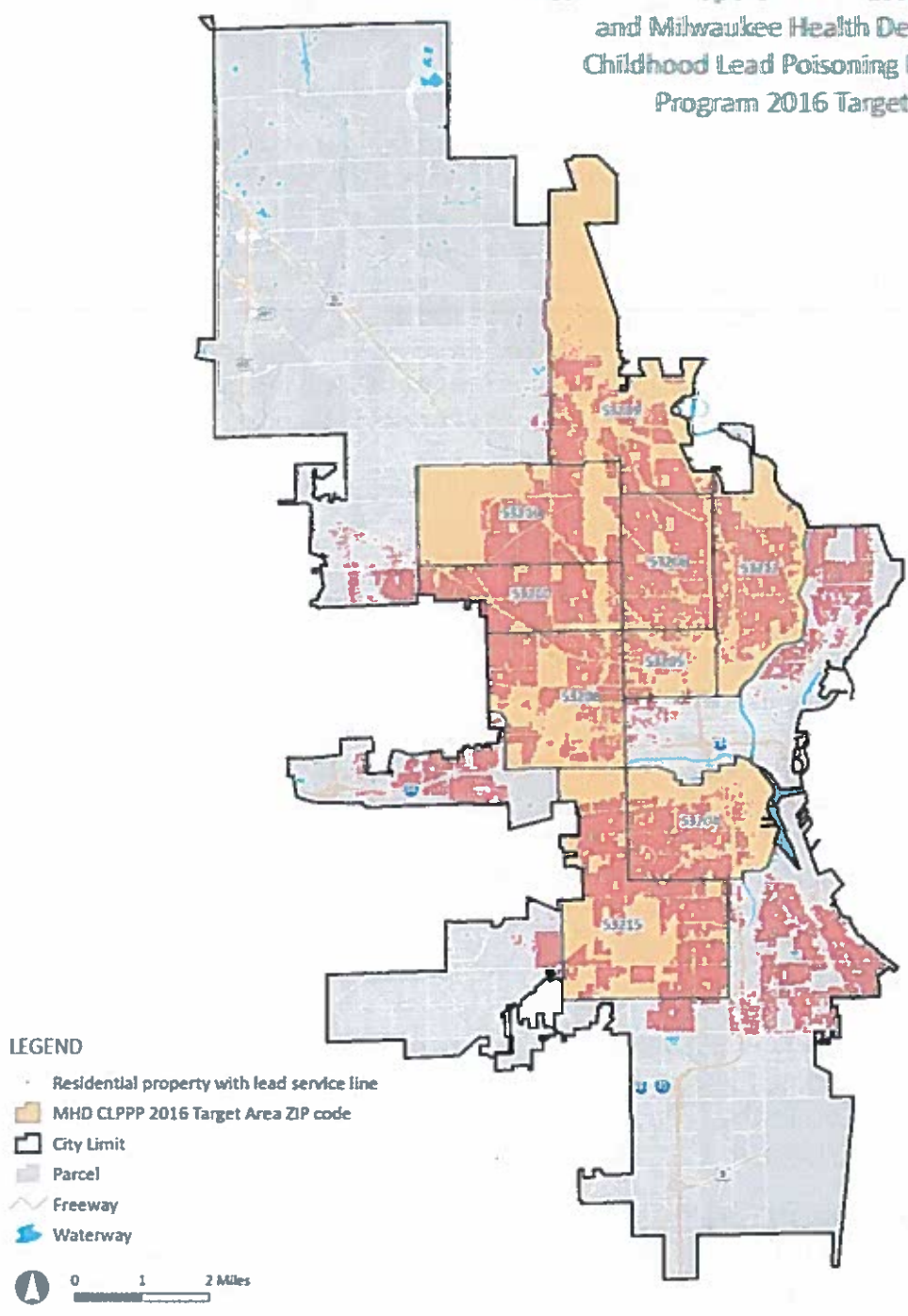
- Property must be assessed at or under \$150,000 (for 1 and 2 unit buildings)
- Rental properties must have low-income tenants or vacant units must be made available to low-income tenants
- Owner-occupants must meet income requirements, have a pregnant woman, or children under the age of 4 in the home
- Property taxes must be current and the property must have no open building code violations
- The owner must be willing to pay up to 9% of the costs, plus a \$57 permit fee
- The owner must be available for inspection with a lead inspector

### **Outreach and Education Efforts**

For more than 20 years, the City of Milwaukee Health Department Childhood Lead Poisoning Prevention Program has provided information and conducted outreach around lead hazards in the community, partnering with local organizations to provide informational resources to the public. The City of Milwaukee Health Department provides informational resources for the public on its website [Milwaukee.gov/health](http://city.milwaukee.gov/health) (direct link: <http://city.milwaukee.gov/health/lead-Poisoning#.WKH1cvIzXVh>)

In 2017, the City of Milwaukee Health Department partnered with Milwaukee Water Works to launch a broad public awareness campaign to increase awareness of lead hazards, promote primary prevention steps to reducing exposure to lead hazards, and increase screening for elevated blood lead levels. The “Lead-Safe Milwaukee” campaign launched on February 3, 2017 and includes an informational website ([leadsafemke.com](http://leadsafemke.com)), online and outdoor advertising, and information outreach targeted to parents who have children under the age of 6.

**CITY OF MILWAUKEE**  
 Residential Properties with Lead Service Lines  
 and Milwaukee Health Department  
 Childhood Lead Poisoning Prevention  
 Program 2016 Target Area



Data Sources: Milwaukee Water Works, Milwaukee Health Department  
 Prepared by City of Milwaukee DOA BMD-kpp, 06/20/2016

**ROLE OF COUNTY IN MUNICIPAL EFFORTS**

Given that the County does not provide water to the properties in the target area and does not have property code enforcement ability or access to these properties, the primary role that Milwaukee County can provide in assisting the City of Milwaukee is in

leveraging additional financial resources. However, given that the City's area of focus (CLPPP Target areas outlined in the map above) does not align with the targeted area that is referenced in File #16-484, there is a challenge in developing an aligned approach. As such, it is recommended that whatever role Milwaukee County plays in addressing lead poisoning remediation align with a targeted geography of the water utilities and municipalities.

Milwaukee County does not have excess financial or staff capacity to begin contributing to a public health campaign that is fundamentally within the purview of the City health department and water utility. Milwaukee County has significant existing capital needs and mandated services that are underfunded and do require immediate financial assistance. Given these great challenges already facing Milwaukee County, it is recommended that any financial grant assistance provided by Milwaukee County be in the form of leveraged third party funds or access to third party financing and not direct tax levy assistance. Property Assessed Clean Energy (PACE) Equity financing is one potential third party source and is described in greater detail below.

Furthermore, it has been requested that the County explore opportunities to develop a revolving loan fund to disburse and manage loans to replace private water laterals. Managing such a fund would be a new activity for Milwaukee County and it is recommended that a separate entity with expertise, access to capital, and knowledge manage such a fund rather than direct management by the County. PACE financing offers the benefits of providing access to capital without the requirement that the County provide seed funding. Capital and risk are distributed to the lending market which has the capacity and knowledge to manage such a program. In the past, Milwaukee County has worked with the Milwaukee Economic Development Corporation (MEDC) to manage a revolving loan fund for small business development. This partnership has worked because the loans can "revolve" profits generated from loans which in turn create capacity for new loans. The replacement of lead service laterals or lead paint creates no new wealth or profit for the individual receiving a loan, and thereby is only a financial burden without new wealth to pay off the debt. This risk could be addressed through PACE financing.

It should also be noted that the total remediation of lead laterals within the City of Milwaukee alone is expected to cost between \$511 million and \$756 million for property owners and \$266 million to the City of Milwaukee. Due to this substantial sum, the full remediation is expected to take decades to complete.

### **GRANT FUNDING OPPORTUNITIES**

The following table is a list of potential grants which if awarded could serve as funding sources for the remediation of lead poisoning risk. The Office of Lead Hazard Control and Healthy Homes, US Department of Housing and Urban Development (HUD) indicated that they currently do not have funding available for this purpose. However, these offices will be monitored for new funding opportunities given the change in administration. All federal funding sources are contingent upon federal funding appropriations to these offices. It is also important to note that many of the grants are already used by the City of Milwaukee and if the County were to compete for these funds, it may take away from the resources available to the City of Milwaukee.

<b>Funding Agency</b>	<b>Award Name</b>	<b>Award Amount</b>	<b>Applicant Criteria</b>
HUD	Lead Hazard Reduction Demonstration (LHRD) Grant Program (# 14.905)	\$3,000,000 maximum \$1,000,000 minimum per project	Local Government- must have at least 3500 pre 1940 occupied rental housing units and provide a 25% match of the federal request
HUD	Lead Based Paint Hazard Control (LBPHC) Grant Program (# 14.900)	\$2,500,000 maximum and \$1,000,000 minimum per project	Ok to apply as a consortium with other government units. Funds to implement comprehensive programs to identify and remediate lead based paint hazards in privately owned rental or owner occupied housing.
HUD	The Operation Lead Elimination Action Program (LEAP)	Unknown	
EPA	Toxic Substances Compliance Monitoring Cooperative Agreements ( # 66.701)	Unknown	State/Tribal Government
EPA	TSCA Title IV State Lead Grants Certification of Lead- Based Paint Professionals (#66.707)	Unknown	Local government
EPA	Environmental Workforce Development and Job Training Cooperative Agreements (#66.815)	Unknown	Local Government
EPA	Small Grants Proposals	\$30,000	Local Government
EPA	Source Reduction Assistance ( #66.717)	Unknown	Local Government

### **LOAN PROGRAM**

An informational report related to PACE Equity Financing was provided to the Economic and Community Development Committee in January 2017 (File #17-148).

PACE, or Property Assessed Clean Energy, is a financing program that enables property owners to obtain low-cost, long-term loans for energy-efficiency, renewable energy and water conservation improvements to their property. PACE loans are secured by the land which means that PACE programs attach the obligation to repay the cost of improvements to the property, not to the individual borrower. PACE financing is authorized pursuant to Wisconsin Statute Sec. 66.0627(8), (the "PACE Statute"). The PACE Statute enables "political subdivisions" (counties, cities, towns and villages) to impose a special charge on real property to secure loans made for energy efficiency, water conservation and renewable energy improvements. The PACE Statute authorizes two sources for financing PACE loans – third-party financing (including banks, other private lenders or affiliates of the PACE borrower) and public financing by a political subdivision. Due to the well-developed national application of PACE, there is currently a network of private capital available for PACE Loans which is the predominant source of financing. Lending institutions include national banks, local banks, insurance entities, specialized lenders, credit unions, and individual lenders.

The PACE Statute provides for a "direct billing" system in which the PACE Lender may collect payments for the PACE Loan directly from the Borrower without involving the political subdivision that imposed the Special Charge. Following the close of a PACE Loan, the PACE Lender would certify to the Program Administrator the annual PACE installments that are due. The Program Administrator then works with a Servicer to bill for and collect the annual installment payments from the PACE Borrower. Upon each installment payment, the Program Administrator's Servicer would certify that payments have been made and remit the installment payments collected directly to the PACE Lender.

A political subdivision must adopt a local ordinance authorizing the use of special charges to secure PACE financings and must create a program structure for the use of PACE special charges to ensure that PACE financings made in its jurisdiction are consistent with the PACE Statute.

At this point, the applicability of PACE equity financing is a potential source for lead lateral replacement, though the concept requires further vetting and examination before a true recommendation can be provided to the Board.

#### **RECOMMENDATION**

In response to File #16-484 and the actions requested therein, it is recommended that –

- Milwaukee County align its area of focus to match the area of focus of the City of Milwaukee and Milwaukee Water Works;
- Milwaukee County pursue grant opportunities to support lead poisoning remediation in lieu of direct cash grant contributions;
- Milwaukee County further explore the potential of PACE equity financing in being able to address private property improvements;
- Prior to recommending a specific methodology of lead paint remediation (enclosure or removal), a thorough risk assessment of the property should be conducted.



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James Tarantino

Economic Development Director, Department of Administrative Services



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Rick Norris

Community Business Development Partners Director, Department of Administrative Services

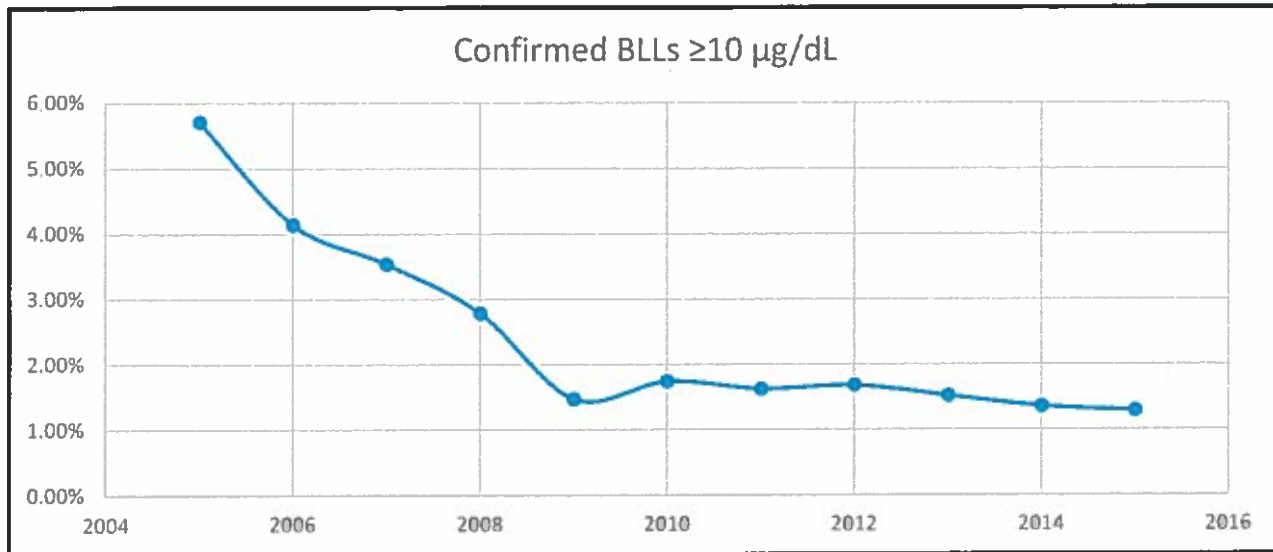
Attachment: Incidence of Lead Poisoning in Milwaukee



cc: Chris Abele, County Executive  
Sup. Theodore Lipscomb, Sr. County Board Chairman  
Transportation, Public Works, and Transit Committee Members  
Teig Whaley-Smith, Director, Department of Administrative Services  
Raisa Koltun, Chief of Staff, Office of the County Executive  
Kelly Bablitch, Chief of Staff, County Board of Supervisors  
Scott Manske, Comptroller  
Steve Cady, Research & Policy Director, Office of the Comptroller  
Shanin Brown, Committee Coordinator, County Clerk

**CBLS County-level Summary Data for Milwaukee County, WI**

YEAR	# of Children Tested	Percent of Children Tested	Total # Children Tested 5-9 $\mu\text{g}/\text{dL}$	Confirmed BLLs $\geq 10$ $\mu\text{g}/\text{dL}$		# of Addresses- Multiple Children w/ Confirmed EBLLs *	Census 2000 Data			Estimated Population of Children < 6, 2009
				Total #	Total %		Total Housing Units	Pre-1950 Housing Units	% of Children < 6 Below Poverty	
2005	27,336	33.9%		1,562	5.71%	1,079	400,093	163,688	26.0%	80,644
2006	26,343	31.1%		1,091	4.14%	935	400,093	163,688	26.0%	84,789
2007	29,686	34.1%		1,050	3.54%	727	400,093	163,688	26.0%	86,965
2008	30,896	35.0%		862	2.79%	570	400,093	163,688	26.0%	88,153
2009	33,432	38.2%		492	1.47%		400,093	163,688	26.0%	87,608
2010	36,532		5,124	638	1.75%		400,093	163,688	26.0%	
2011	37,371		4,406	610	1.63%		400,093	163,688	26.0%	
2012	36,292		3,503	613	1.69%	231	400,093	163,688	26.0%	
2013	33,994		3,052	521	1.53%	214	400,093	163,688	26.0%	
2014	32,173		2,488	442	1.37%	185	400,093	163,688	26.0%	
2015	30,552		2,340	399	1.31%	167	400,093	163,688	26.0%	



**KEY**

**BLL = Blood Lead Level**

**$\mu\text{g}/\text{dL}$  = micrograms per deciliter**