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MICHAEL SUMMERS MAYOR

October 1, 2018

Lakewood City Council 12650 Detroit Avenue Lakewood, OH 44107

Re: Compliance with the Clean Water Act: The Road Ahead

Dear Members of Council:

Lakewood is confronting the challenge of updating its unique, 100-year-old sewer system to meet the requirements of the Clean Water Act through active enforcement by Ohio EPA and US EPA.

The Clean Water Act of 1972 (the CWA) established the basic structure for the regulation of discharges of pollutants into the waters of the United States and set quality standards for surface waters.

The CWA outlawed the discharge of any pollutant into navigable waters without a specific permit via the <u>National Pollutant Discharge Elimination System (NPDES)</u>. These permits are issued by the Ohio EPA.

The City of Lakewood's NPDES permits are issued for a five-year period. Lakewood's current permit expires in 2019. The current NPDES, permit requires the City to submit a overflow control plan by March 1st, 2019. This plan must demonstrate evaluation of strategies, alternatives, and ultimately a recommended approach to capture and treat discharges from Lakewood's overflows from our combined storm and sanitary water that are released untreated to our watershed in certain large rain storms.

It is critical to remember that Lakewood sewers are a very unusual combination of sewer types that were not originally designed or constructed as a single system. The design standards of the period of construction were different than what came later, and what became legally-required after the enactment of the CWA.

It is important to understand that our sewer system was designed to overflow into Lake Erie and the Rocky River when large amounts of rain occur in short amounts of time. Think of Oct 2017 when we receive .8 inches of rain in 20 minutes. The alternative to this overflow is basement backups. It is unacceptable that every basement in Lakewood be viewed as a temporary storage tank for these large storms.

(For a helpful look at how parts of our system were designed and what measures communities have been taking to address overflows, see the diagrams attached to this letter. These have been shared before but they explain very important concepts.)

Despite that evolution of the system, due to Lakewood's continuing investments, our system performs very well compared to other systems of the same period of design. Today, our sewer system collects and treats up to 10 times our everyday dry weather flows of sanitary and ground water . Our system's treatment capacity is up to 40 million gallons per day (MGD). This is an important number. Someday you will amaze yourself that you remember it.

Why is a law enacted in 1972 just now being actively enforced in Lakewood in 2018? The answer is that, despite Lakewood's continued progress, the enforcement has been winding its way across the country from big cities to mid and small cities. Thus, we follow on the heels of Cleveland, Akron, Cincinnati, Columbus, Mansfield, Lima, Youngstown, etc. We are Ohio's 15th largest city. It is now our turn.

Nationally, just about every case of enforcement that involves the US EPA, the U.S. Department of Justice demands that the parties enter a Federal Consent Decree, overseen by a Federal Judge. US EPA has broached that concept by sending Lakewood a draft consent decree. Whether a consent decree is the best compliance vehicle for the singular circumstances of Lakewood will remain a matter of significant discussion in the very near term with US EPA and Ohio EPA. At this moment, our sewer system is under Administrative orders from the U.S. EPA. The regulatory control is exercised by our NPDES permit referenced above. This permit is overseen by the Ohio EPA. Our main objective is to remain under this arrangement.

Road to this Point

The City's Administration has worked for the past 10 years to develop a plan that achieves the spirit and letter of the CWA on an affordable and sustainable path. Since 2003, the City has spent \$60 million to improve our sewer and wastewater system. Approved projects currently in process add an additional \$23 million of improvement, including the High Rate Treatment Plant (HRT) that just went out for bid.

Until 2006, the City began each year with an engineered sewer system that captured and treated 79% of all water—storm and sanitary—with the remainder 21% overflowing into Lake Erie untreated as mostly rainwater and some sanitary water

In 2011, the City invested \$5 million in an expansion of our Waste Water Treatment facility. This expansion increased the City's daily capacity from 30 million gallons per day to 40 MGD. This project increased our waste water capture & treatment rate to 83%.

In 2016, the City added the West End aerial sewer and in 2018 expanded the Lake Avenue sewer main that further increased the City's total waste water capture and treatment to 85%.

The \$23 million investment recently approved by Lakewood City Council for the High Rate Treatment addition to our treatment plant (HRT) will advance our capture & treatment percentage to 88% by 2021.

For context, it is also important to understand that communities in Ohio and across the country are under federal consent decrees that require them to spend billions over decades with the goal of achieving 85% control.

What We Know Today

Our extensive, decade-long engineering analysis has resulted in the identification of 10 major projects intended to bring the City to a capture & treatment rate of 98% for all water in a typical year. We know that these 10 projects are estimated to cost approximately \$274 million, with the last \$100 million having dramatically diminished returns for water capture & treatment.

This Administration is acutely aware that affordability, rather than technology, is the controlling factor in any program. One common measure of affordability refers to a typical household's combined water and wastewater bill at 4% of that household's income. Excluding the \$274 million of new projects, by 2024, the projected water and sewer rates necessary to finance the HRT project and other legacy investments and continue the necessary maintenance, operation and upkeep of current assets will move 40% of Lakewood households into the EPA's "high burden" category, with sewer and water rates collectively rates exceeding 4% of their household income. Any new projects required by enforcement will add to that high burden.

Tonight, I formally introduce this subject to City Council for your deliberation and ultimate endorsement by March 1, 2019 of an Integrated Wet Weather Improvement Plan. Our obligation and opportunity is to advocate for and influence the regulators to achieve the best outcome for our community and our watershed. But we must understand that the elected officials and citizens of Lakewood are not the sole decision-makers for this waste water treatment plan and its enforcement.

I ask City council to dedicate the time necessary to educate your selves on all aspects of the proposed plan and to participate in other public discussions. This is a complex subject.

- A. You must gain an understanding of the strategic engineering options of storage, conveyance, treatment and system separations, and their multiple combinations. (See attached images.)
- B. It is an important distinction that we are the decision makers on the methods of financing this plan, and how to maximize efficiencies through integration with any other capital investments, including leveraging non-local ratepayer funding.
- C. There will be critical questions regarding how to engagement with the Regulatory agencies in order to achieve an affordable and sustainable agreement within the requirement of the CWA.

City Council's Role/Decisions

- By year end:
 - Establish Water and sewer rates for the next 5 years based on our rate model which captures capital investment and affordability projections.
 - This decision will require you to gain a good understanding of the capital investments and the financial implications of these investments
 - In early 2019, review and approve a IWWIP submission to meet the March 1, 2019 permit deadline.
- By Fall 2019
 - Consider Right of access to private property for purposes of remediation
 - o Determine, for necessary private property improvements :
 - Who pays for private property improvements?
 - What is the equity/fairness of who pays?
 - How does affordability get factored in?
 - What about those have already performed and paid for this work
 - What about those whose homes that do not require remediation?
 - What strategies should be adopted for private property work that needs to be performed immediately because of a mandated deadline?
 - o How will we structure our revenues?
 - Continue with user fees for water consumption
 - Add a fixed fee
 - Create incentives for successful private property investments
 - Sewer separation- storm water from sanitary water in lateral pipes to the street
 - Green infrastructure (bio swales, rain barrels, downspout disconnections, permeable surfaces)

On October 23rd, 2018 we will convene our Clean Water Lakewood Task Force and our Resiliency Task Force, as well as our Planning Commission members to brief them on our progress with our plan and the ramifications of our plan.

We will schedule a community discussion of this complex subject in late November or early December and another in January 2019.

Timeline

- City council work sessions to consider rate increases and Long Term control Plan
- 1st stakeholder meeting October 23rd (task forces, planning Commission, Public welcome)
- 2nd stakeholder meeting (task forces, etc.) in November 2018
- 1st public meeting: December 2018
- 2nd public meeting: January 2019
- Public discussion throughout in structured manner
- Submit revised IWWIP on March 1st
- March 1 December 2019
- Continue public discussion and decision making regarding financing structure beyond rates and the taxpayer equity challenges
- Continue discussion with regulators- including new NPDES permit renewal

Desired Outcomes of Our Work

- Acceptance of the engineered solutions we will provide March 1, 2019
- Recognition of the financial limitations of our city's ability to finance this plan
- Acknowledgment of and support for the integrated approach of our plan
- Recognition of our effort to align with U.S. Department of Energy
- Acknowledgment of the need to maintain investments in our regular 2nd century infrastructure plans that include
 - Drinking water infrastructure
 - Street surface
 - o 2nd century houses
 - Parks and pools
 - City buildings and equipment, including emerging technology
- Acknowledgment of and support for our need for flexibility and very long timeframes for implementation
- Recognition that our proven pattern of investments (\$83 million) demonstrates good faith effort to comply with the CWA that warrants our continuation under administrative orders.

It has been the Administration's goal and focus for several years to help Ohio EPA and US EPA to acknowledge and support Lakewood's need for flexibility and very long

timeframes for implementation to update 100-year-old infrastructure. We have repeated often that our proven progress from the pattern of investments (\$83 million) demonstrates good faith effort to comply with the CWA.

Now, as elected representatives aligned with an informed citizenry, we must advocate for our community, and convince the Regulators that any unreasonable requirement detached from economic reality has the potential to stop our compliance progress, as well as to undermine the positive momentum Lakewood has achieved since the Great Recession.

Very truly yours,

Michael P. Summers

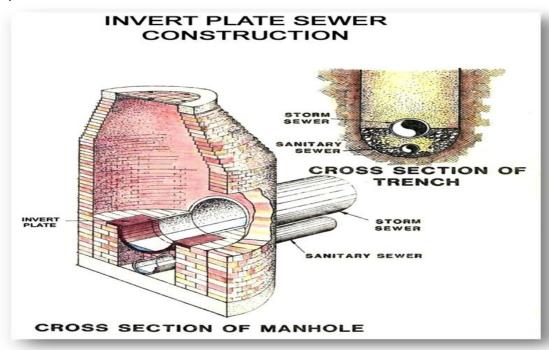
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Explanatory Diagrams

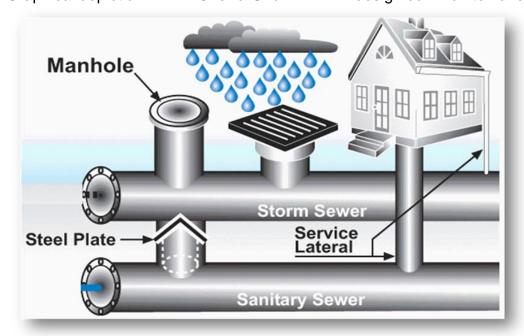
The roof tops of the 17,000 structures in Lakewood serve as the primary collector of storm water. How this storm water moves of this property is the essence of "source control":



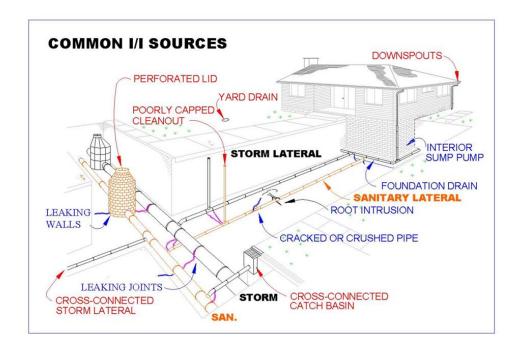
Depiction of the common sewer construction on Lakewood:



Graphical depiction of the "Over & Under Sewer" design common to Lakewood:



Source Control addresses how water is directed off private property. Many problems arise from age and deterioration over time. Problems also arise from inappropriate installation when the house was built.



Tunneling is the most common example of storage- collect, store and treat later. The tunnels fill up during a rain storm and are emptied afterwards to be treated:



Green infrastructure example: bio swales to capture and divert storm water into the ground versus the storm sewer system:

