Hydrant Flushing Update

The City of Berwyn and the Metropolitan Water Reclamation District of Greater Chicago have received an increase in the number of calls regarding sewer gas odors especially during the evening and overnight hours in our city.

The last few months has been a period of very low rainfall, including only l" of rain cumulative since
August 3, 2017. Without enough rainfall, the sediment which would normally flow to the water treatment plant stays in the local sewers and decomposes in-place. Due to a process called thermal inversion, the warm air in the sewer rises during the evening hours. These two circumstances are believed to be creating the conditions that would produce more noticeable odors late in the evening.

This morning, the City began flushing the local sewers with water from fire hydrants, adding water to the system to help move the sediment downstream to the wastewater treatment plant. Additionally, this could also fill the traps in the inlets and provide some water cover as a barrier to gasses that are escaping.

Today (9/27), hydrants were flushed from Roosevelt to Pershing between Harlem and Oak Park Avenues; Tomorrow (9/28), hydrants will be flushed from Roosevelt to Pershing between Oak Park and Ridgeland Avenues; and Friday (9/29), hydrants will be flushed from Roosevelt to Pershing between Ridgeland and Lombard Avenues.

After the flushing takes place you may notice discoloration of your water. If you do experience discoloration, run water from a fixture that is located in the lowest level of your house or business until the water runs clear. Do not do laundry during hydrant flushing in your neighborhood and wait until you have clear running water before you start washing clothes. Please note that responses to emergency calls may alter the schedule in your neighborhood. If you have any questions or concerns, please contact the Fire Department at 708-484-1644.

The City of Berwyn

Robert P. Schiller
Director of Public Works

A Century of Progress with Pride

September 26, 2017

To: Mayor Robert J. Lovero
Members of the Berwyn City Council

Re: Information regarding the sewer gas odors throughout Berwyn and other communities.

I have been communicating with the Metropolitan Water Reclamation District of Greater Chicago regarding the increasing calls regarding sewer gas odors especially in the evening and overnight. This memorandum outlines some of the factors associated with the odors and the steps Berwyn is going to take to try to reduce the odors.

The last few months has been a period of very low rainfall, including only 1" of rain cumulative since August 3, 2017. During low flows the velocity in a sewer decreases, allowing sediment to deposit in the pipes. This sediment normally gets flushed out during higher flow, such as during a significant rainfall, and is carried to the wastewater treatment plant. If you do not have enough rainfall the sediment can stay in the local sewers and decompose in-place.

What may be causing odors to emanate from the local sewer system in the late evening is a process called thermal inversion. During the day the wastewater in the sewer is cooler or around the same temperature as the outside air but when the air temperatures dip overnight the warmer air in the sewer can rise up out of the manhole and be more noticeable. In August the average wastewater temperature entering the plant was around 73 degrees so it's plausible that the air in the sewers would rise up overnight given that the overnight temperatures dipped a few weeks ago. That, coupled with the increased likelihood of decomposing sedimentation in the local sewers because of the low precipitation could be the conditions that would produce more noticeable odors late in the evening.

Tomorrow, the city will begin be to flush the local sewers with water from fire hydrants as discussed with MWRD. By flushing hydrants we will add water to the system helping move solids downstream to the wastewater treatment plant. Additionally, this could also fill the traps in the inlets and provide some water cover as a barrier to gasses escaping

Respectfully,

Robert Schiller
Director of Public Works