Re: Smoke Testing of the Sanitary Sewer Collection System

Dear Resident:

During rain storms and periods of high groundwater conditions, the City of De Pere experiences increased volumes of flow into the sanitary sewer system. These increased flows of clear-water into the system eventually contribute to higher operating costs such as the increased sizing of mainline sewers and the final treatment costs at the wastewater plant. The high flows are primarily due to the infiltration and inflow (I&I) of surface water and ground water into the sewer system. Given the problems experienced with I&I, it is extremely important to take steps to eliminate clear-water that does not belong in the sanitary sewer system.

A smoke testing project will be conducted on the City of De Pere Wastewater Collection System near your property to detect sources of inflow and infiltration. A prioritized list identifying the most cost-effective and potentially largest contributors to I&I will be developed by the City’s consultant. The purpose of the smoke testing program is to identify and correct defects before they become major failures, address capacity issues, reduce treatment costs at the wastewater treatment plant.

The smoke testing program is scheduled to take place near your property on Tuesday, August 10, 2021. In case of inclement weather, the smoke testing process will take place on Wednesday, August 11. A map of the smoke testing area is included with this letter for your reference.

Each section of the sanitary sewer collection system will be examined for sources of clear water entry into the system. During the smoke testing process, smoke will be blown throughout the entire system within the study area via manhole structures. As the forced smoke travels through the system it will appear from areas of inflow or infiltration such as roof drains, catch basins, and vent stacks connected to the system. In addition, smoke may appear from cracks in the pavement above the sewer system, from turf areas, or around homes which have foundation drains connected to the system. Smoke may also appear in basements by means of: unused floor drains, disconnected plumbing fixtures, faulty plumbing fixtures, or any direct open connection to the sanitary service lateral.
In an effort to reduce these possibilities, please take the following precautions:

- Pour a small bucket of water down all floor drains (typically found in your home’s basement and in utility rooms of buildings built on a concrete slab), sinks, or other seldom used plumbing fixtures.
- Check for and fill all other plumbing traps with water to avoid the entry of smoke into the structure.

Be advised that the smoke utilized in the testing process is a non-staining, non-toxic material and will dissipate rapidly, leaving no residual odor. Any and all smoke that may enter your structure will dissipate at a more rapid rate if a window or door is opened. Be advised that any person or persons who suffer from heart and/or lung diseases, such as emphysema, should vacate the structure prior to the testing process. In addition, all housebound persons and those who anticipate to be sleeping during testing (e.g. shift workers) should make special arrangements for the anticipated testing date. Any confined pets should be moved from the premises if there is any possibility or likelihood of direct exposure to the smoke during the testing process. It takes only a short time to test an average City block area. It is not necessary for anyone to be home during the testing period.

If for any reason, smoke should appear in your building during the testing processes. Please contact a member of the survey team that will be working in the area or call the City of De Pere Engineering Department at 920-339-4061 for additional assistance.

The materials to be used in this smoke testing process have been analyzed by a team of experts in the fields of Industrial Hygiene, Toxicology, and Medicine. Their mutual report concluded: “None of the smokes (tested) appear capable of causing minor injury to people who may be exposed during controlled use.”

Your understanding and cooperation during this testing process will be most appreciated. If you have any questions, please feel free to contact me by dialing 920-339-4072 ext. 2239.

Sincerely,

PUBLIC WORKS DEPARTMENT

Chase Kuffel, P.E.
Assistant City Engineer

cc.

Mayor and Alderpersons
Larry Delo, City Administrator
Judy Schmidt-Lehman, City Attorney
Debbie Armbruster, Health Director
Derek Beiderwieden, Police Chief

Alan Matzke, Fire Chief
Scott Thoresen, Public Works Director
Eric Rakers, City Engineer
Scott Lax, Senior Engineer Technician
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