Recommended changes may include:

- Adjusting your production process
- Changing your cleaning methods
- Installing a pH probe to monitor your sewage
- Constructing a pH treatment equipment in your facility

If your property has a pH probe and/or pH treatment equipment in place, you should:

- Keep pH equipment operational
- Keep the pH probe at the right sample point
- Designate staff to document, report, repair malfunctioning and/or broken equipment

If your pH probe and/or treatment equipment does not work, it may be caused by the following:

- pH treatment equipment malfunction
- pH probe is not calibrated properly
- Poor maintenance

pH controller

pH probe

What are the consequences of violating *Markham's Sewer Use Bylaw*?

Managing pH levels between 6 and 10.5 in your waste is critical to the long-term sustainability of the City's sewer system and your internal plumbing. Violating *Markham's Sewer Use Bylaw* by releasing waste outside these pH limits into the City's sewer system will result in:

- Violation Notices and Orders to Comply
- Fines and penalties
- Payment for sewer damage repairs or sewer blockage cleanup
- Criminal record and litigation for any human injuries

Need more information?

markham.ca | 905-477-5530
customerservice@markham.ca

MARKHAM

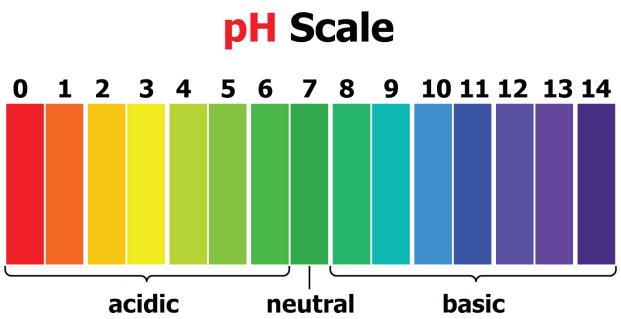
Controlling the pH Level in Your Sewage

For Industrial, Commercial & Institutional Properties

MARKHAM

What is pH?

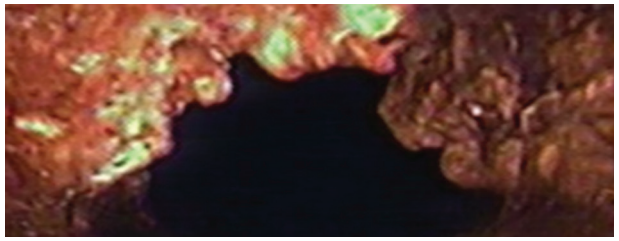
pH is a measurement of the concentration of hydrogen ions (H^+) in a fluid. If a fluid has a low pH level, it is acidic. If a fluid has a high pH level, it is basic. To comply with *Markham's Sewer Use Bylaw*, sewage disposed from your facility must have a pH level between 6 and 10.5.



Why are uncontrolled levels of pH a concern?

If waste with a pH level outside the 6 to 10.5 range is released into Markham's sewer system, it can quickly cause significant damage and/or blockages.

Corroded concrete caused by low pH levels

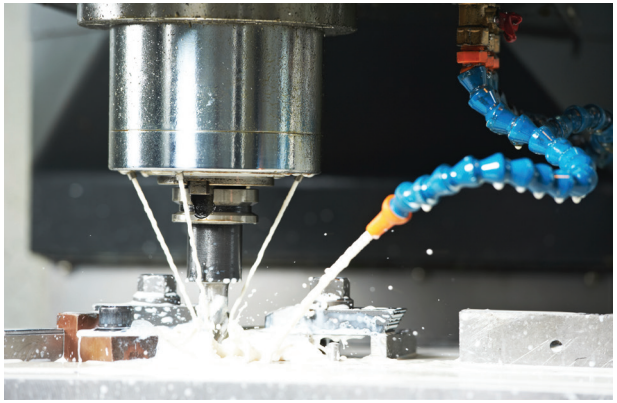


Build up / scaling caused by high pH levels

How can industrial and commercial activities affect pH levels in sewage?

Much of the damage caused to Markham's sewer system stems from pH levels outside the bylaw limits that are released from harmful industrial and commercial activities, such as:

- Wet manufacturing where water is used during the production process and then discarded



Wet manufacturing

- Washing containers and drums used for storing chemical products
- Use of chemical-based floor cleaners
- Poorly maintained food interceptors which can cause food waste to ferment
- Cleaning chemical spills

Food interceptor

Why should I be concerned about pH levels?

Uncontrolled pH levels are harmful to the environment and can damage or plug your internal plumbing, your sewer connection to the City's system or the City's sewer system itself. This could disrupt your operations and increase your operating costs. It is in your best interest to comply with *Markham's Sewer Use Bylaw.* Violating the bylaw is illegal and could result in possible fines or a criminal record.

How can you comply with *Markham's Sewer Use Bylaw*?

Managing pH levels and complying with *Markham's Sewer Use Bylaw* is easy. The first thing you should do is to perform a Litmus Test to determine whether or not you have an uncontrolled pH level issue.

Litmus Test

If you determine that your pH level is outside the 6 to 10.5 range, you must hire a professional to resolve the issue.