

Concerns: Odour and Stormwater

Prepared by the Town of Morinville

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www.morinville.ca

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In response to questions from residents regarding the odour both inside and outside their homes the Town has prepared the following information:

1. What causes the odour?

In the spring when the snow is thawing and water is running or following a high wind or storm the odour is related to the stormwater system. The bad odour you notice is a result of stagnant and unaerated water. In general terms, the “good” bacteria in ponds need oxygen to break down decaying plant and animal material and other materials collected through runoff that end up in the stormwater system. Without adequate oxygen or enough “good” bacteria in the water, the natural cycle is unable to keep up resulting in an odour.

The pond located in Heritage Village off of 107 St is designed to drain along the stormwater system that flows past 105 Ave through The Lakes and into the Manawan Canal north of Sunshine Estates area. During the spring thaw the system carries stagnant and unaerated stormwater while also collecting stormwater from residential sump discharges via stormwater pipes and catch basins.

Odours detected inside residences may be more noticeable during this time if there are plumbing or venting issues. Most commonly these are dry or clogged traps and/or lack of adequate venting. Below are tips and general information provided for your reference to help you assist in identifying the potential source of the odour before calling a plumber.

2. There is an odour in my house – What Do I Do Now?

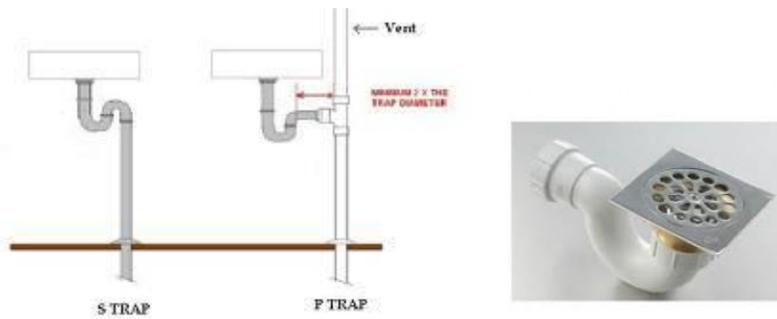
There are a variety of reasons that storm sewer odours may be entering a residence.

- A common reason is the lack of required traps or vents. Every fixture should have a trap and a vent pipe to keep odours from entering the home. If traps and vent pipes are missing, you may need the help of a plumber to install them immediately.
- A frequent cause for inside odours is a dry trap. Pouring a quart of water into all sinks, showers/tubs and floor drains may correct this problem. All drains to a sewer system have a "P" shaped trap that is usually filled with water. The trap provides a seal to keep out storm sewer odours. If your basement floor drain is rarely used, water evaporates

from the trap over time. Eventually the seal is eliminated, allowing storm sewer odours into your house. To alleviate the odour pour water into the drain.

- Specifically, the trap under the basin may not be holding enough water and is allowing storm sewer odours into the room. You may want to inspect your trap and be sure it holds enough water.
- If you have an old "house trap" in your basement the trap may be cracked or broken allowing odours to seep through the cracks and into your home.
- If the smell is noticeable mainly around a sink, try flushing a strong cleaner and bleach down the sink's overflow-the small hole(s) inside the bowl near the rim. When the sink fills to near overflowing, water is routed through an inner chamber to the drain. Debris can collect inside the inner chamber, causing odor.
- A frequent cause for inside odors is a clogged vent. You may need the help of a plumber or a handyman to disconnect the vent pipes inside your home and clean your vents all the way through to the roof. You may have wondered why houses have pipes sticking up out of the roof. They are vent pipes to relieve the pressure so that P-traps can do their jobs. It turns out that vents also break vacuums so water flows down the pipes faster.

Examples of Traps



3. How Do I Find Places Where Storm Sewer Odour Is Entering My Home?

- Check all of the traps in your house to make sure your water seal is correct. If not, add water in the trap.
- Check all of the vents and clean-out caps for tightness to prevent odour from escaping into the house.
- Go on the roof or have a plumber or handyman go on the roof and check all of your vent stacks to see if it is clogged or debris (even ice/snow) is lodged in one of the vent pipes.

- Get a smoke test done on your drains. A plumber/drain cleaner will cap off all drain vents on your house, and blow smoke in your drain, waste, vent system; wherever you see smoke in your house that is where the storm sewer odour is coming from.

4. How Do Vents and Traps Work?

- Traps need to hold enough water to form an airlock against odours.
- Traps in each fixture, when properly vented, provide a liquid seal that prevents odours from entering the building.
- Vents allow odours to flow up the main vent pipe and exit the system without coming into your home through plumbing fixtures.
- Vents equalize pressure to aid drainage and allow odours to escape to the outer air.
- Without a properly functioning trap and vent, high or low pressure in the drains may contribute to odours.
- The vent system allows outside air into the drain system to keep vacuums from forming in the drains.
- Each plumbing fixture should also have a vent that allows storm sewer odours to escape and atmospheric pressure to enter, thus preventing backpressure when water fills the pipes.
- Traps need to hold enough water to form an airlock against odours.

Conditions with High Atmospheric Pressure

- Without venting, high pressure in the drains may force storm sewer odours out through traps and toilets.
- You'll probably hear gurgling and bubbling in the fixtures.

Conditions with Low Atmospheric Pressure

- Without proper venting, lower pressure in the drains may cause siphoning in the traps whenever you drain fixtures.
- If the traps are dry, storm sewer odours vents directly into the house.



5. What is the Town doing about this?

The Town treated the Heritage Lake Estates (HVE) pond in the spring and summer of 2015 and will be continuing with this program this year as this is the start of the system. The product selected, after researching and following up with other municipalities is outlined at this website <http://awtech.ca/home/lakesandponds/>. The Town will continue to monitor and treat this pond as well as get water samples in the spring to see if oxygen levels are improving.

6. For further questions or concerns related to this issue contact Public Works.

Phone: 780-939-2590

In writing:

- Go to the Town of Morinville website (www.morinville.ca)
- Fly the cursor over the Contact Us tab and click on Email Contact Form or [click here](#)
- Choose “Public Works”
- Fill in the various areas of the form and press “Send”
- Administration strives to respond to all inquiries within 48 hours

In person:

Visit Public Works at 10310 – 107 Street

Please Note: Town of Morinville Administration does not monitor and/or respond to Town related issues/concerns/complaints on non-official Town social media pages. If you have a concern, inquiry or complaint, please utilize the above mentioned options in order to contact the appropriate sources and receive an accurate and factual response.