

# Sheens and Foams

How to tell the difference between pollution and a naturally occurring process.

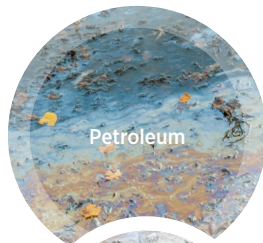
Naturally-occurring bacteria and decomposition of plant and animal matter can produce foam or rainbow-coloured sheens that can be easily confused for pollution. These organic processes are generally harmless to the environment and do not need to be reported to the City of Saskatoon.

## Sheens

Sheens are an iridescent or shiny appearance on the water or banks of a body of water, such as the South Saskatchewan River. Often these sheens are associated with spills of petroleum products such as gasoline, diesel fuel, or motor oil but organic sheens can occur from naturally occurring bacteria, or from the decomposition of leaves and other plant or animal matter.

### How can you tell the difference between organic and petroleum sheens?

- **Look for a source:** Can you see a source of petroleum spill around the area?
- **Take a smell:** Organic sheens occasionally will smell like potting soil or decay or will not have a smell. If it smells like gas, then it may be a petroleum spill.
- **Investigate with a stick test:** If it is safe to approach the location of the sheen, use a stick to poke or drop a rock into the water. If the sheen breaks up into smaller platelets, it is likely organic. If the sheen moves back together to close the gaps, it is likely petroleum.



## Foam

Decomposition of plant matter releases compounds called surfactants. These surfactants float on the top of the water as a thin film and break the surface tension of the water, allowing air to mix in and create natural foam. Sometimes we see these natural foams when it is raining in the water flowing to the storm drain or in the river. Foam that is similar in appearance can also be from non-natural sources such as detergents and may be harmful to aquatic life.



### How can you tell the difference between natural and unnatural foams?

- **Color:** Natural foam tends to be a white, light tan or brown color with bubbles and debris. Unnatural foam is typically bright white in color and may repel dirt.
- **Smell:** Natural foam can smell like potting soil, fish, or fresh cut grass. Unnatural foam smells like perfume, detergent, or soap.
- **Location:** Natural foam can occur over large areas and in large amounts, especially behind obstructions or in eddies. Unnatural foam occurs near the source of pollution and usually over a smaller area.

## What to do if you suspect a spill of petroleum or other pollutant?

To protect the health and safety of residents, our environment, and the South Saskatchewan River, spills and discharges should be stopped, cleaned or remediated, and reported.

If you cause or discover a spill, note the location and approximate size of the spill and:

### Call 911 if:

- The spilled material cannot be identified.
- The spill is not contained or controlled.
- City services or roadways are interrupted.
- There are injured or contaminated individuals.
- You are unsure of the risks.

### Call the Customer Care Centre (306-975-2476) if:

- The spilled substance can be identified.
- The spill is entering or already in the river or a pond.
- The spill is entering the sewer system, a manhole or a catch basin.
- If you observe someone dumping a substance into any of the above locations.

## Spills on Private Property

If the spill, release or emergency may harm the environment or pose a risk to public health or safety it must also be reported to the Saskatchewan Ministry of Environment Spill Control Centre:

### SaskSpills

Provincial Spill Control Centre (24 hours): [1-800-667-7525](tel:1-800-667-7525)

