

# Information Sheet - FIREWORKS

# Fireworks offer a brilliant, spectacular and fabulous display! However, DID YOU KNOW they have a real impact on our environment.

# Toxic compounds released into the environment

- The explosion of fireworks releases a large quantity of gasses into the air, more particularly SO2 (sulfur dioxide) and NOX (nitrogen oxide).
- Variations in concentrations are strongly influenced by local meteorological conditions.

#### **Health risks**

- Inhalation of pyrotechnic smoke can cause cough, fever and dyspnea in spectators and exacerbation of asthma.
- The consequences of such inhalation are particularly serious for infants, pregnant women, and the elderly.

#### **Noise Pollution**

- Explosions and flashes of light can have a negative impact on local wildlife.
- It is also observed that several species of birds abandon their nests following the fear caused by the explosions. This issue is particularly troubling during the critical nesting season for loons.

#### **Soil Pollution**

- The spread of certain contaminants, which penetrate natural environments and cause a pollutant overload.
- Part of the ClO4 (perchlorate) is absorbed by plants because of soil moisture, but the vast majority seeps into bodies of water.

# **Water Pollution**

- Metallic residues can be deposited on the water surface and migrate towards the bottom before strongly adsorption on the sediments.
- ClO4 (perchlorate) is kinetically stable and inert, allowing it to persist for years, even decades, under typical surface water and groundwater conditions.

### SOME IDEAS TO REDUCE THE ENVIRONMENTAL IMPACT

- Participate in community fireworks away from the water to celebrate St-Jean-Baptiste or Canada Day
- Respect the commonly accepted quiet hours to maintain public peace such as between 10 PM 7 AM.
- Continue to respect bans of fireworks in the event of a pollution episode, such as smog and do not use fireworks during dry periods to prevent forest fires.
- Share this Information Sheet with AirBNB users.
- Remember that you must buy a permit to set off fireworks (available in person at City Hall for \$30.)

Source: Évaluation de l'impact des feux d'artifice sur l'environnement,. Gabrielle Lajoie, presented to the Centre universitaire de formation en environnement et développement durable de l'Université de Sherbrooke in 2018.