



NOT JUST A  
*Fire Hazard*



HOW BURNING GARBAGE CAN HARM YOU AND THE ENVIRONMENT



Lac La Biche County  
welcoming by nature.

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## *Introduction*

**MANY PEOPLE DON'T THINK TWICE ABOUT OPEN-BURNING GARBAGE - BUT THEN, MANY PEOPLE MIGHT NOT REALIZE JUST HOW HARMFUL IT CAN BE.**

*Open-burning means burning in a barrel, a fire pit, a fireplace or any other environment that isn't completely contained and controlled. Open-burning garbage is a problem, because the smoke and toxic substances that result from it have to go somewhere.*

# IT IS AGAINST THE LAW TO BURN WASTE IN LAC LA BICHE COUNTY.

Lac La Biche County Bylaw 12-006 (Fire Protection Bylaw) forbids burning non-wooden materials like waste. Residents who do not obey the bylaw could be fined up to \$1,000.

Prohibited debris (things you are not allowed to burn) includes:

- Animal manure
- Pathological or biohazardous waste
- Non-wooden material
- Waste material from building or construction sites (excluding wooden materials that do not contain wood preservatives)
- Combustible materials in automobile bodies
- Tires
- Rubber or plastic, or anything containing or coated with rubber or plastic or similar substances
- Used oil
- Painted wood or wood products
- Wood or wood products containing preservatives

**For more information about the Fire Protection Bylaw, please call (780) 623-6767. The Government of Alberta also prohibits burning the above types of materials. Provincial fines may be higher.**

*Note: If you lose control of a fire and the fire department has to put it out for you, then you may be charged for the cost of the emergency response.*



# Is this an issue in Lac La Biche County?

Lac La Biche County is taking steps to educate the public, in order to help protect residents' health and the natural environment. The County believes in promoting environmental awareness and responsibility among residents, and burning garbage is an easy habit to change.

## HOW IS BURNING GARBAGE HAZARDOUS?

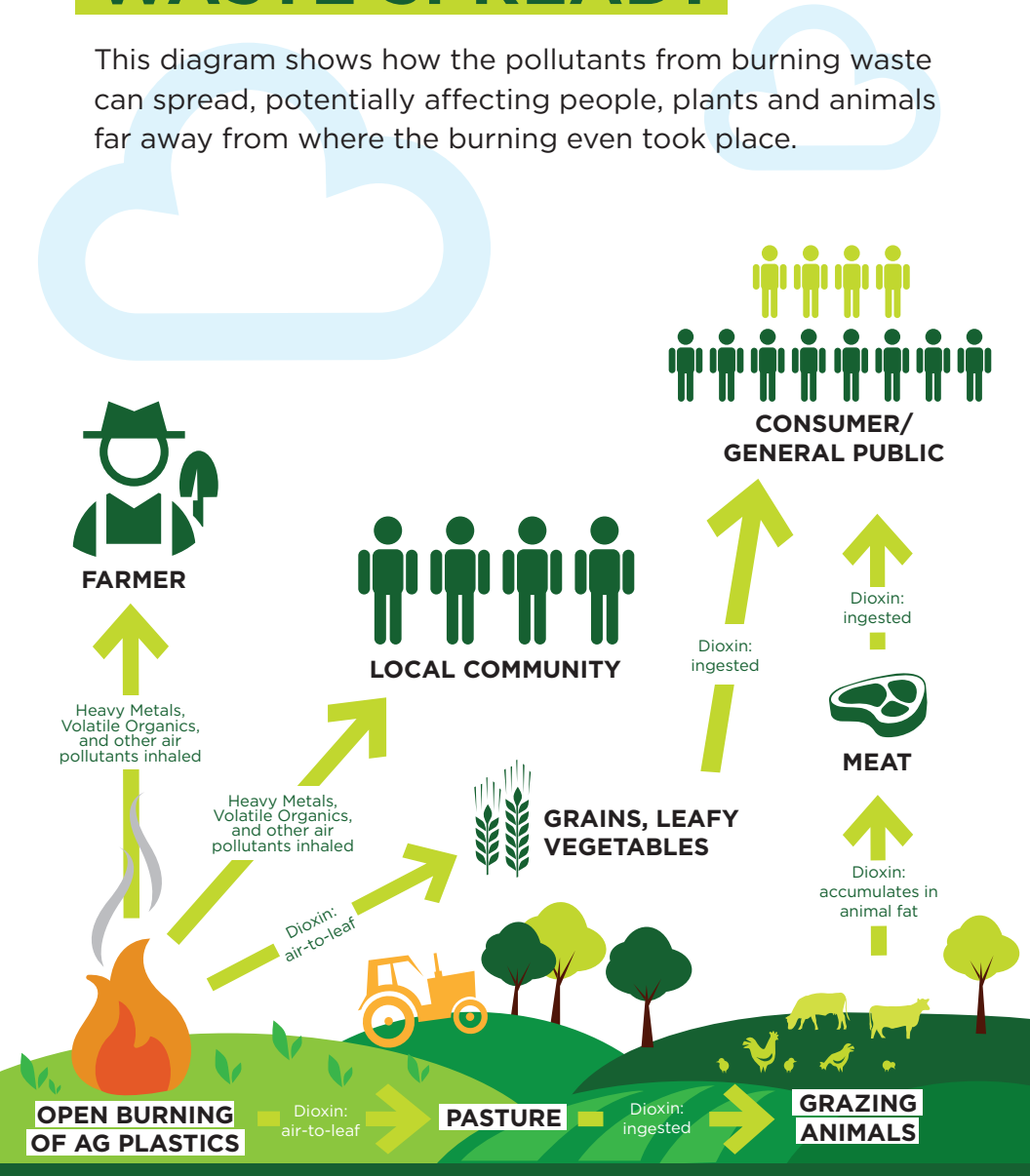
There are several reasons why burning garbage is hazardous for you, your family and the environment.

- 1. Smoke:** The smoke created by burning garbage might contain pollutants like arsenic, carbon monoxide, dioxins and furans (see below), mercury and more.
- 2. Dioxins and Furans:** These form a group of toxic chemicals. In Canada, open-burning garbage produces more dioxins and furans than all industrial activities combined.
  - a. Effects of Dioxins and Furans on Human Health:** Exposure to dioxins and furans has been linked to certain types of cancers, liver problems and other health concerns.
  - b. Effects of Dioxins and Furans on the Environment:** Open-burning garbage is more common in rural and agricultural areas, which means dioxins and furans can find their way into crop fields, pastures and water bodies. Lac La Biche County has plenty of all three.
- 3. If dioxins and furans settle on plants,** then animals might eat them, and the toxic chemicals could stay in the food chain until humans consume them.
- 4. Risk of explosions:** Materials react differently to heat. Certain items, like aerosols and batteries, may explode when burned. This could result in serious injury, or cause you to lose control of the fire.

*Information in this section is courtesy of the Government of Canada ("Open burning of garbage: health and environmental risks" - <https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/municipal-solid/environment/open-burning-garbage-health-risks.html>)*

# HOW DO POLLUTANTS FROM BURNING WASTE SPREAD?

This diagram shows how the pollutants from burning waste can spread, potentially affecting people, plants and animals far away from where the burning even took place.



## POTENTIAL HEALTH EFFECTS OF EXPOSURE TO POLLUTANTS

Burning waste can affect your health and the wellbeing of others in many ways. A variety of pollutants may be released when waste is burned. Below are some common examples and the ways they can impact humans.

Pollutant	Possible effects on you
<b>Carbon monoxide</b>	Dizziness, headaches, nausea, etc. Prolonged exposure can lead to carbon monoxide poisoning.
<b>Dioxins and furans</b>	Exposure has been linked to certain types of cancers, liver problems and impaired bodily systems.
<b>Particulate matter</b> (substances in the air, like smoke or soot, that may be visible or invisible)	Problems in the lungs and bloodstream, including heart problems. Exposure can make respiratory conditions like asthma worse.
<b>Sulfur dioxide</b>	Coughing, shortness of breath, nose and throat irritation, etc.

Note: All burning can potentially release pollutants. Burning waste like plastics is especially hazardous, which is why Lac La Biche County wants to help residents who do this change their ways.

## HOW THE ENVIRONMENT MAY BE IMPACTED

Plants and animals are affected by pollutants, just like humans. Toxic substances can alter the soil conditions, water quality and other aspects of the environment.

In addition, you need to remember that substances like dioxins and furans can move through the food chain (see diagram on page 6). For example, if a chemical settles on the leaves of a plant, which is later eaten by a cow, which is later butchered for meat, that same chemical could eventually be consumed by humans.



(photo: Alanna Okrusko)



## **BURNING WASTE HAS A DISPROPORTIONATE EFFECT**

You might think that burning a pile of waste once or twice is not a big deal. However, consider the far-reaching implications of this. If there is smoke or fumes, how far will the wind carry them or how long until they come down as moisture or rain - what goes up must come down.

If substances enter the soil, how long will it take for the soil quality to be restored - and where will the substances go? If pollutants enter a water body, how far downstream will plants and animals be impacted? And if chemicals enter the food chain, how long will it be before they're ingested by humans?

**Remember that local residents are allowed to bring up to 500 kilograms (approx. 1,100 lbs.) of waste to a landfill or transfer station at no charge. The County's waste and recycling management sites are strictly controlled, which means disposing of waste there is a much healthier choice for you, your family and future generations.**



# HOW DO I CHANGE?

Burning garbage is an easy habit to change. Plus, Lac La Biche County offers a wide variety of programs and services to help you deal with waste and recyclables in more environmentally responsible ways.

**Reduce:** Avoid single-use items like paper plates, plastic cutlery, aluminum foil, Styrofoam items and plastic grocery bags.

**Reuse:** Be a conscientious consumer and buy items that are made to last. If something is broken, see if you can fix it or repurpose it, rather than just replace it. If you don't want something anymore, consider donating it or leaving it in a Reuse Centre, found at each County landfill and transfer station.

**Recycle:** Keep and use recycling containers at your home. Refer to the County's What Goes Where guide (available online at [laclabichecounty.com](http://laclabichecounty.com)) for a complete list of recyclable items. Some might surprise you, like car parts, electronics, paint and more. These items can be recycled at all of the County's landfills and transfer stations.

**Compost:** Composting is a great way to turn organic waste like food leftovers and leaf and yard waste into nutrient-rich fertilizer. The County sells composters at the County Centre office on Highway 881 for \$72 each, and runs the Community Organics Recycling Enhancement (CORE) program, which encourages residents to compost more in their daily lives.

**Safely dispose:** Instead of burning waste, take the time to dispose of your non-recyclable items at local landfills and transfer stations. Burning waste gets rid of the garbage, but it also creates a more serious problem.

The County's waste and recycling management sites are strictly controlled, which means disposing of waste there is a much healthier choice for you, your family and future generations.

# KEY POINTS:

1. Burning waste is against the law.
2. Burning waste can affect human health and the environment in several ways.
3. Pollutants from burning waste can spread and impact more people, plants and animals than you might think.
4. There are many more environmentally friendly ways to dispose of waste, like recycling or just bringing it to a landfill or transfer station.

## FOR MORE INFORMATION

about Lac La Biche County's waste and recycling programs and services, please visit our website ([www.laclabichedcounty.com](http://www.laclabichedcounty.com)) or call our Environmental Services department at (780) 623-6739.



# CONTACT US

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