



Compost Fire Safety

After a recent fire involving a Compost Pile, The River Forest Fire Department would like to remind residents of the fire hazard associated with Compost Piles.

Composting is a microbial process that converts plant materials such as grass clippings and leaves to a more usable organic soil amendment or mulch. Gardeners have used compost for centuries to increase soil organic matter, improve soil physical properties, and supply some of the essential nutrients for plant growth.

When can a Compost pile become a Fire Hazard?

Compost can be a fire hazard when the pile has been neglected. It's also a risk when new, dry material is placed on a hot pile or when the compost is located close to combustible material such as a wood fence or garage. Composting piles can heat up due to the decomposing plant material in a closely packed pile. Compost will only catch fire if the decomposing material reaches temperatures where the compost material begins to smolder and the upper layers of the compost have started to dry out. Compost fires can occur due to a combination of factors, including high temperatures, low moisture content, and the presence of combustible materials. Causes of compost fires include dry composting material left unturned and unattended, a large pile that is well insulated but has insufficient airflow, and inadequate moisture in the pile.

“Smoking” Compost Does Not Always Mean Smoldering Compost

Compost piles can generate enough heat to turn the moist air in the compost into visible water vapor. This “smoke” often emanates from the compost in a smoke-like manner, leading people to believe the compost is smoldering. It is most commonly seen on cool mornings or evenings. It is not smoke but rather the warm moist air escaping the pile and mimicking smoke. The principle is the same as your breath being visible in the cool morning air.

Weather conditions can also contribute to conditions that can cause a compost fire. For example, a sudden hot, dry spell in the weather can cause the internal temperature to increase significantly and dry out the outer layers of the compost.

These conditions could potentially produce the “perfect storm” of conditions leading to a compost fire! Managing a compost pile is not difficult or very time-consuming, making it easy to keep your compost pile under control properly. While compost has a small fire risk, it is significantly reduced by proper maintenance. Don't let this rare occurrence put you off from starting your own composting activity! The benefits far outweigh the fire risk.

For more information, call the River Forest Fire Prevention Bureau at 708-714-3562 or like and follow us on Facebook and Instagram