AGRICULTURAL AND OPEN BURNING

I. Why do we need to control burning?

Burning is a practical tool in agricultural production and an age-old method of waste reduction. However, pollution from smoke can be poor for our health, a nuisance, and an out of control fire can be dangerous and destructive.

Health effects - Smoke contains carbon dioxide, water vapor, and products of incomplete combustion. Smoke particles not completely burned which are very small in size, 10 microns in diameter or smaller, are unhealthy. These very small particles are inhalable and can go deep into the lungs. They are made up of droplets of condensed organic and inorganic vapors such as wood tars and toxic metals along with nitrogen and sulfur oxides, carbon monoxide and numerous hydrocarbons. These droplets will escape from the fire uncombusted and when inhaled into a person's lungs will cause irritation and coughing. Smoke particles may be trapped in the lungs for years, contributing to lung changes. chronic lung diseases and cancer.

Public Nuisance - People complain about odors and reduced visibility from smoky air pollution. Smoke from burning debris clouds the clear skies and fills houses with its foul smells. For many people, who have reduced lung function, allergies or who are sensitive to smoke, adverse reactions are triggered in them when they are exposed to the smoke.

Wild Fire - Every year in our area property is lost and lives are threatened when open burning gets out of control. Fire departments responding to wild fires spend many tax dollars and man-hours fighting fires that are preventable with some knowledge, and care.

II. What is open burning?

Open burning is the burning of any material or substance in the ambient air or in a receptacle such as a barrel. It includes the burning of old buildings, sheds, and other structures or waste materials that can't be hauled to the landfill.

What is okay to burn? - The burning of weeds, garden waste, tree trimmings, or brush is okay. The burning of large diameter tree limbs and trunks, old building structures and any other material resulting in a large fire requires special permitting and attention.

What shouldn't be burned? - The burning of household trash, construction debris, rubber, plastics, tires, asphalt shingles, insulation or other similar dense or toxic smoke producing substances are prohibited.

III. What is agricultural burning:

Agricultural burning is open burning activity conducted in the course of agriculture or commercial crop production. It also includes operations raising animals or fowl for the primary purpose of making a profit, or providing a livelihood.

What is okay to burn? - The burning of field crops, orchard trimmings, irrigation ditches, ditchbanks, weed abatement, crop production refuse for disease or pest prevention, fence lines, etc. are okay.

What shouldn't be burned? - Petroleum products, demolition debris, forest product waste, wood palates, and anything not processed or manufactured in an agricultural business.

IV. How to burn

First consider other methods of disposal. Ask yourself if this has to be burned or if there is another way to dispose of the refuse. Haul the waste to the landfill, compost the waste, or bury it on-site. If another disposal method is possible, use it.

Remove as much of the non-combustible and toxic smoke producing material form the pile as possible. Tar paper, asphalt shingles, construction debris, petroleum waste, tires, metal, plastics should be separated out. Also, dirt won't burn!

Build small piles loosely stacked with good airflow. Air circulating through the pile is one key for a cleaner burn. Smaller pieces burn faster and cleaner than large chunks because there is more surface area. So reduce the thickness of the material if possible. If there is **not** enough air the pile will smolder and poor combustion will result, creating more air pollution.

Make sure the material you are burning is dry. If you can, use the crackle test to determine the dryness of the material. Bend dry twigs or sticks sharply until the material makes an audible "snap". If the material is not dry allow more drying time before burning.

DRY WASTE + HIGH TEMPERATURE IGNITION + LOTS OF AIR = CLEANER FIRE WITH LESS SMOKE

Use a good ignition source to start the fire. Make sure there is enough kindling to get the fire going rapidly. Don't use old tires, waste oil or another black smoke producer to start the fire.

Weather conditions play an important part in a good burn. A day when the air has stagnated in the valley is NOT a good time to burn. The smoke from the fire will hang close to the surface of the ground and not mix or disperse rapidly causing nuisance conditions. On the other hand, wind over 5 mph is dangerous and may cause the fire to get out of control. Choose a day that is not a no-burn advisory day

and one where there is good ventilation and dispersal of the smoke. If you are in doubt about the weather call the weather service, local health department, or local fire department.

The time of day for a burn is also important. Between 10 am and 3 pm are the optimal times for a burn. Late morning hours have given a chance for the sun to warm the ground evaporate the dew, lifting the inversion lid so the smoke will rise. Smoke will hang close to the ground as the sun goes down and temperatures drop. During a temperature inversion smoke may not leave the area until the next day or later when the sun has warmed up the ground.

Try lighting a test fire to see how well the waste material burns and where the smoke goes. Quit if the fuel is too wet and does not ignite rapidly. Quit if the smoke hangs in the air and travels toward the neighbors or a populated area. Quit if it is too windy or may become windy. Postpone your fire until conditions are more acceptable.

There are several techniques for field burning. Backfiring, lighting the downwind side of a field, which allows the fire to burn slower and more thoroughly. It produces fewer particles and doesn't leave behind as many smoldering smoky patches. Stripfiring ignites the field in strips by walking straight through the field and lighting the fire as you are going into the wind.

AT NO TIME SHOULD A FIRE BE LEFT UNATTENDED! Conditions may change, and a fire may get out of control rapidly. A means of extinguishing the flames should also be available to help contain the fire. Contact your local fire department before you start a large burn.

V. Regulation & Permits

Agricultural burning is permitted throughout the State of Colorado, but all other open burning in your area may be regulated or prohibited by your local government. Contact your local health department, fire department, city, town, or county to find out if you can burn before you light your fire. Also, a state permit from the Colorado Department of Health & Environment may be required for open burning. Extended dry weather conditions may prompt local officials to ban all open burning for a period of time until conditions improve. Fines or penalties may be imposed for burning illegally.

PLEASE CALL THE PHONE NUMBER BELOW TO MAKE SURE OF THE LAWS IN YOUR AREA BEFORE YOU LIGHT THE MATCH!

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