### A GOOD NEIGHBORS GUIDE TO WOOD BURNING IN RAPID CITY

Provided by Rapid City Community Development, Air Quality Control Division

# Know the Law

Wood burning activities are regulated by Rapid City Municipal Code (RCMC) Chapter 8.34 and Pennington County Ordinance No. 12.

The violation of any of provision of these ordinances is subject to a \$500 fine and/or 30 days in jail. Each calendar day a violation occurs shall be considered a separate offense.

# You will be fined for burning trash or any inappropriate fuel

8.34.160 Restrictions on solid fuel burning devices. B. *Inappropriate fuels* burned in a solid fuel burning device prohibited. No person shall, at any time, burn inappropriate fuel as defined in 8.34.320(X) in any solid fuel burning device. No person shall use a fuel in a solid fuel burning device, except those that are recommended by the manufacturer, subject to any installation or operational restrictions imposed by the manufacturer.

### Inappropriate fuel:

RCMC 8.34.320(X) Includes, but is not limited to: leaves, grass clippings, pine needles, green plants, refuse, paper, rubbish, books, magazines, fiberboard, packaging, rags, fabrics, building materials, animal waste, liquid or gelatinous hydrocarbons, tar, paints and solvents, chemically soaked or treated wood, plastic or rubber, and the materials specified in 8.34.170(C).

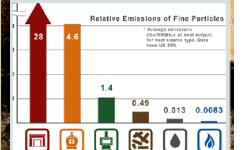
### Appropriate fuel:

RCMC 8.34.320(S) "Untreated dry wood and lumber, coal and products manufactured for the sole purpose as a fuel. UNTREATED WOOD OR LUMBER shall mean wood in its natural state that has not been chemically soaked or treated."

Household trash is an inappropriate fuel and will be considered a violation of city and county law if burned in a solid fuel burning device, applicable to the above fines and/or jail time.

## Cleaner Options

Replacing an old wood stove or fireplace with a more energy efficient appliance can save fuel, money and protect you and your family's health.



There are many cleaner, energy saving options, ranging from gas to high-tech wood stoves certified by the EPA.

# Clean air is a common resource that we all share. Don't let your neighbors' lungs pay for your smoke

# Woodburning, Your Health, and Your Wallet

Wood burning has a significant effect on wintertime air quality in Rapid City. Our unique topography of ridges and hills creates temperature inversions that trap pollutants, forms haze, and makes breathing difficult for Rapid City's most vulnerable residents.

### WOOD SMOKE IS TOXIC

Smoke from neighborhood stoves and fireplaces contributes to indoor and outdoor air pollution because it produces carbon monoxide (CO), volatile organic compounds (VOCs), oxides of nitrogen, (NOx), particulate matter, and toxic pollutants like benzene and formaldehyde.

Wood smoke interferes with normal lung development in infants and children, and short-term exposure increases the risk of heart attacks in adults.

## FIREPLACES & OLD WOOD BURNERS DON'T MAKE CENTS

Most fireplaces draw air from the room and out through the chimney, sending your money and effort up in smoke. Because of incomplete combustion, old "damper-style" wood stoves burn inefficiently, creating smoke and particulate. EPAcertified wood stoves are designed to burn hot and efficiently, producing much less smoke.

# Tips for a cleaner burn

If you absolutely must burn wood, limit the amount of smoke entering your neighbors' homes by following these tips to burn more efficiently:

Heating your home with a gas furnace is a cleaner, more healthy, and cost-effective alternative, and should be your primary heat source **before** resorting to a wood stove.

### Burn only dry, seasoned firewood

Firewood should dry for a MINIMUM of 6 to 12 months after splitting. Hardwoods dry more slowly than softwoods, but burn longer and cleaner. Split big logs for faster drying, and stack loosely and crosswise to let air circulate. The burning of inappropriate fuel is a violation of Rapid City Municipal Code.

### Keep your wood pile dry

Stack a foot or more off the ground and away from buildings. Cover the top to keep rain off, but keep the sides open to breezes. Listen for a "crack!" Dry wood makes a sound like a bat hitting baseball, wet wood makes a dull "thud."

#### Build a small, hot fire

Open the damper wide, allowing air to fuel the fire for 30 minutes after lighting and refueling. Use small, dry kindling or clean newspaper to light, then add bigger kindling a few at a time. Get it burning briskly to form a bed of hot coals, then add 2 or 3 logs, placing them close enough together to keep them hot but far apart enough to let air move between.

### Never let your fire smolder

Remember to keep it hot! A dampened, smoldering fire allows unburned gases and particulates to go out the chimney as smoke and enter the homes of your neighbors as a nuisance.

### Never burn overnight or unattended

It's a major fire hazard. Build a small, hot fire and let it burn out completely. When the fire is out, close the damper tightly.

#### Watch for smoke signals

After a half hour, a properly burning fire should give off only a thin wisp of white steam. If you see smoke, adjust the dampers to let in more air. The darker the smoke, the more fuel is being wasted and the more pollutants are entering our air.

Your chimney tells all: a wood burner operating correctly produces little to no smoke.

#### Have your chimney cleaned yearly

Yearly inspection and upkeep by a professional to remove creosote buildup will increase efficiency and decrease the risk of a house fire.

# Choose not to burn when air quality is poor

When it is foggy, air is stagnant, or there is a temperature inversion, smoke is trapped near ground level and can't disperse. Check for air quality alerts before you burn. You can check the Rapid City Air Quality index at airnow.gov.