#### Learn Before You Burn

Kentucky Division for Air Quality





#### Our Mission

To protect human health and the environment by achieving and maintaining acceptable air quality through:

- Air monitoring
- Creating partnerships
- Public information
- Permitting and compliance









#### Open Burning in Kentucky

- What is it?
- Why be concerned?
- Legal or Illegal?
- Restrictions
- How you can help



#### What is Open Burning?



Outdoor burning of any material without an approved burn chamber, stack, or chimney with control devices approved by the KY Division for Air Quality.

Open burning is regulated under KY Title 401 KAR 63:005.

# Open Burning Creates Fire and Safety Hazards



The Kentucky
Division of Forestry
estimates that 35 to
40 percent of
wildfires in Kentucky
start when open
burning gets out of
control.

#### Open Burning Impacts Air Quality



 Makes it harder for areas to meet air quality standards

Can't always tell
 where or when open
 burning is occurring,
 making it challenging
 to control



# Open Burning Impacts Soil & Water



Chemicals and heavy metals from open burning settle out of the air and into soil and water.

# Open Burning Harms Human Health

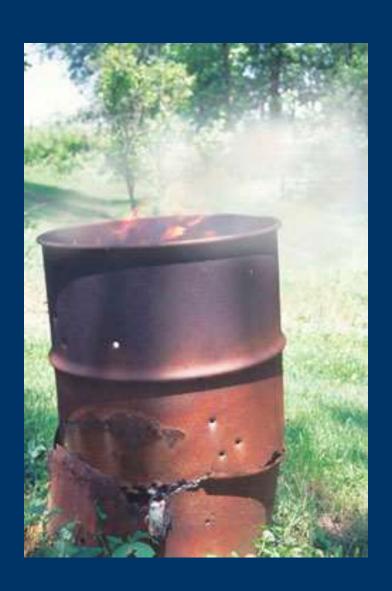


### Smoke from open burning:

- Depresses the central nervous system
- Is especially harmful to children, the elderly, and adults with respiratory diseases

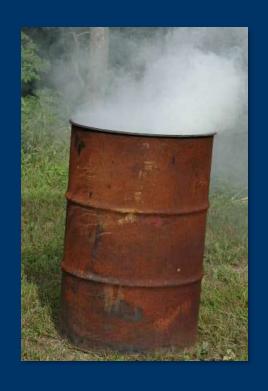
#### Where there's smoke ...

- Dioxins
- Furans
- Benzene
- Arsenic
- Carbon monoxide
- Lead
- Mercury
- Hydrogen chloride
- Hydrogen cyanide



#### Backyard Burn Barrels:

Largest single source of airborne dioxins in U.S. (U.S. EPA)







In just one year, a single backyard burn barrel can produce more dioxins than a municipal trash incinerator.

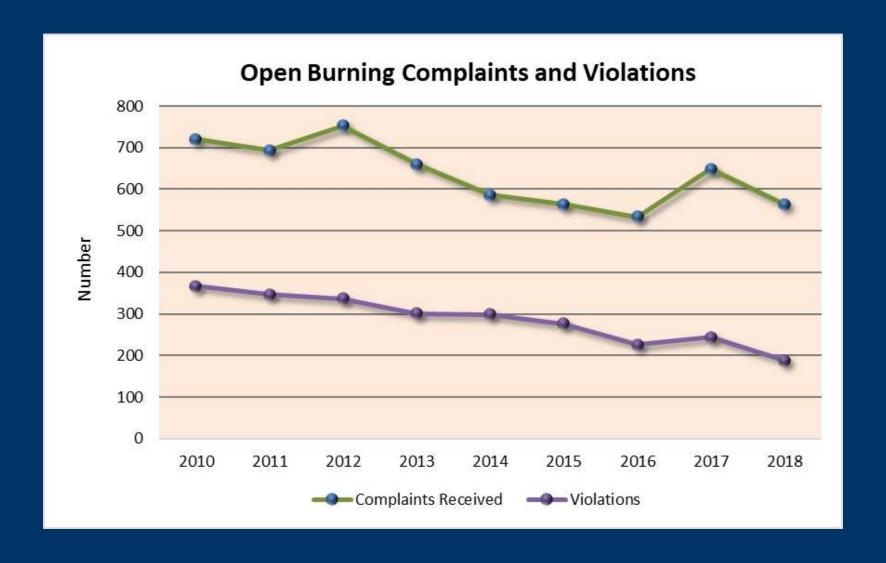
#### Dioxins & Furans

- A family of chlorinated organic chemicals
- Includes the main chemical ingredient in "Agent Orange"
- Found in plastics, bleached paper products
- Extremely toxic
- Highly persistent in the environment
- Accumulate in fatty tissues

#### Dioxins move through the food chain



### Illegal open burning in Kentucky continues to be a problem



#### How Do We Respond?

- Receive complaint
  - Need an address where the burning happened in order to investigate
- Enter information into complaints database
- Site visit generally within 3-5 working days
- Inspection of burn site
- Depending on the outcome of the investigation, a Letter of Warning or Notice of Violation may be issued

It is not necessary for an inspector to witness the actual burn; evidence may be obtained from debris and ash piles, photos, etc.

#### Legal, or Illegal?



What, when, where, and how a material is burned determines if the burning is legal or illegal.

Call 502-782-6592 to learn before you burn.

#### Legal, or Illegal?



Local county and municipal ordinances may have more stringent rules than the state regulation described in this presentation.





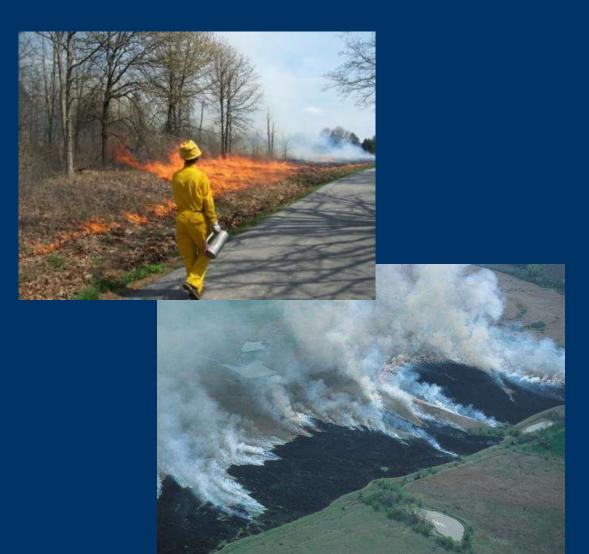
- Fires set for recreational or ceremonial purposes (camp fires, bonfires)
- Small fires set for comfort heat at construction sites (only when air temp. is below 50°)
- Fires set for cooking (camp fires)



#### Burning of:

- Natural growth disturbed as part of land clearing activities (development sites, etc.)
- Trees and tree limbs, felled by storms

Ozone season exceptions: Jefferson, Boone, Kenton, Campbell, Boyd, Bullitt, Oldham, and Lawrence (partial)



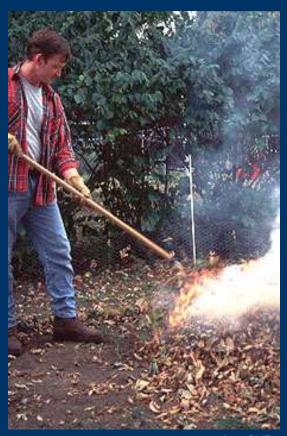
Fires set for recognized agricultural, silvicultural, range, or wildlife management practices.

Fires set for the purpose of instruction and training of firefighters.



- Contact the State Fire Commission for more information.
- Materials likely to produce toxic emissions must be removed prior to burn.
- Additional restrictions apply.

Leaf burning, with some restrictions



Generally only in cities with < 8,000 population (check local ordinance)

The following counties are not allowed to burn leaves during ozone season, May - September:

Jefferson, Boone, Kenton, Campbell, Boyd, Bullitt, Oldham, and Lawrence (partial)

# Uncoated Household Paper Products

Check local ordinances



Office paper



Plain cardboard



Newspaper

#### What About Trash?

Nearly everything found in household trash is illegal to burn.

- Plastic
- Coated paper and cardboard
- Food
- Foam insulation
- Styrofoam
- Metal & glass
- Aerosol cans
- Rubber
- Painted products
- Diapers, clothing



#### Today's Trash is Different

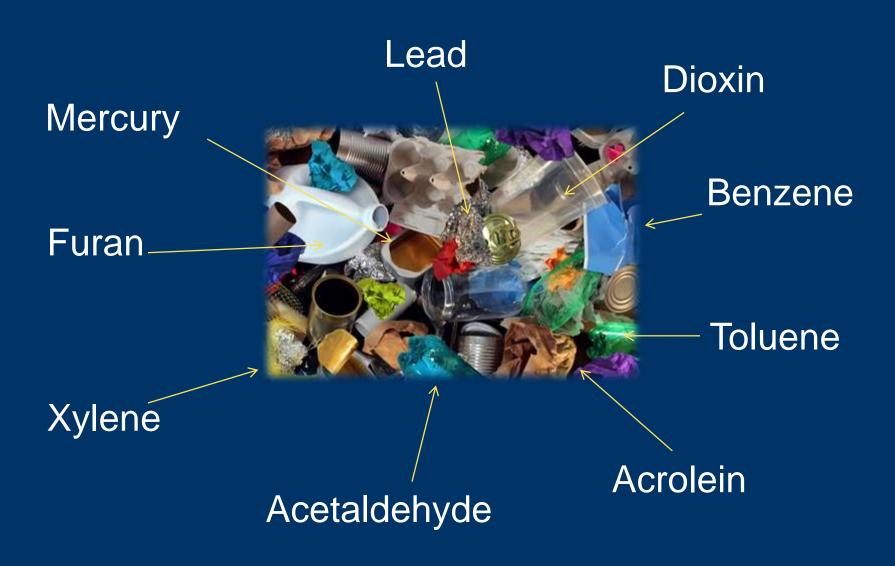


Yesterday's trash



Today's trash

#### What's in that trash?



#### Prohibited Burn Items...

- Tires
- Plastic
- Rubber
- Coated wire
- Insulated wire
- Foam insulation
- Used oil



#### Prohibited Burn Items: Agricultural

- Bedding material
- Muck piles
- Mulch
- Hay
- Treated, stained, or painted lumber
- Fence posts & wood pallets



#### Prohibited Burn Items

#### Grass clippings



- Grass clippings produce excessive smoke
- Grass clippings are "yard waste", which is not permitted to be burned according to 401 KAR 63:005

#### Prohibited Burn Items...



- Agricultural chemical containers
- Household chemical containers

#### Prohibited Burn Items: Buildings



- Buildings may not be disposed of by burning.
- Buildings may be demolished and buried onsite.

## Prohibited Burn Items: Construction/Demolition Debris



- Asbestos materials
- Construction debris
- Demolition debris
- Drywall
- Shingles

# Prohibited Burn Items: Waste from businesses, schools & churches



- Other than land clearing for development, businesses may not dispose of any waste by burning.
- Debris from private businesses may not be transported for burning elsewhere.

### Disposing of Storm Debris County or municipal governments only, with approval

- May be legally burned (observe fire hazard season restrictions & county burn bans).
- Large piles should be divided and burned incrementally over time.
- Care should be taken to locate burn piles away from residences and areas that could be impacted by smoke.



Contact the Division for Air Quality before burning large stockpiles of debris.

#### Disposing of Storm Debris

Demolition debris may *not* be burned. Debris may contain asbestos and other hazardous materials.





Demolition debris piles should be kept wet until final disposal in a landfill.

### Restrictions During Fire Hazard Season

Oct. 1 – Dec. 15 *and* Feb. 15 – April 30



During fire hazard season, burning within 150 feet of any woodland or brushland area is allowed *only during evening hours* between 6 p.m. & 6 a.m.

### Restrictions during ozone season:

May – September

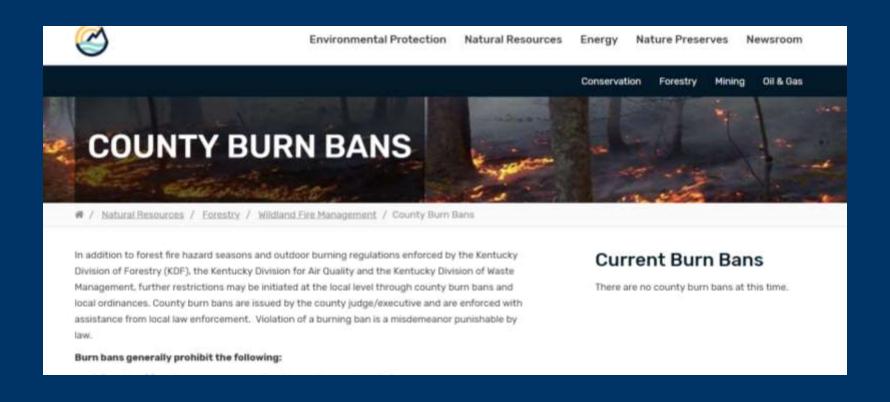




- Only in Boone, Boyd, Bullitt,
   Campbell, Jefferson, Kenton,
   Lawrence, & Oldham counties
- No open burning for land clearing permitted
- Other restrictions apply

#### Burn Bans

- Can be declared by county Judge Executive or Governor
- Generally during extreme risk of wildfire hazard
- Check Division of Forestry's County Burn Bans page



# Where Can You Burn Approved Materials?



- Use common sense to locate fires away from nearby residences or businesses.
- Do not locate fires near streams, sinkholes, or under/over utility lines.
- Check to make sure local city/county ordinances allow burning.

### Illegal burning could result in fines up to \$25,000 per day per violation.



In addition to Division for Air Quality rules, other state and local regulations may apply.

# Most Open Burning is Not Necessary



- Brush could be composted, piled up for wildlife, or simply left to decay.
- Recycling is available in most counties.
- Debris that is not recyclable should be landfilled.

#### Spread the Word

Contact the Division for Air Quality for posters and brochures. Email your request to Roberta.Burnes@ky.gov.

Report illegal burning by calling 502-782-6592.



### Kentucky Division for Air Quality Regional Offices

Ashland	Karen Deskins	(606) 929-5285
Bowling Green	Troy Tabor	(270) 746-7475
Florence	Clay Redmond	(859) 525-4923
Frankfort	Natasha Parker	(502) 564-3358
Hazard	Steve Hall	(606) 435-6022
London	Pete Rayburn	(606) 330-2080
Owensboro	Mac Cann	(270) 687-7304
Paducah	Beth Lents	(270) 898-8468

#### KY Division for Air Quality 300 Sower Blvd. 2<sup>nd</sup> Floor Frankfort, KY 40601 (502) 564-3999

Need more information?
<a href="mailto:burnlaw@ky.gov">burnlaw@ky.gov</a>
502-782-6592



eec.ky.gov/Environmental-Protection/Air