

New Hampshire Department of Environmental Services Solid Waste Facility Operator Training

Open Burning

Presented by:

The New Hampshire Department of Environmental Services

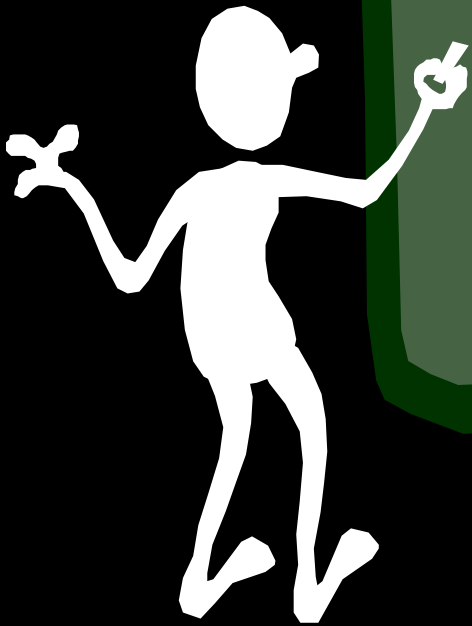


May 2, 2017



Agenda

- ✓ Pollutants & Health Risks*
- ✓ History of Laws and Regulations*
- ✓ Prohibited Materials*
- ✓ What You Can Burn*
- ✓ Starting A Fire*
- ✓ Best Management Practices*



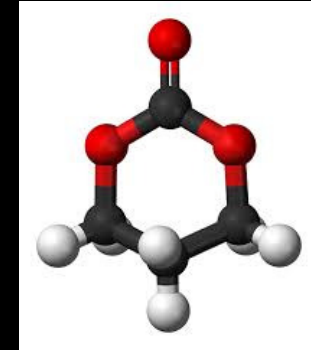
Burning C&D, Household Trash, and Other Wastes

Puts you, your family, neighbors, and the environment at risk!

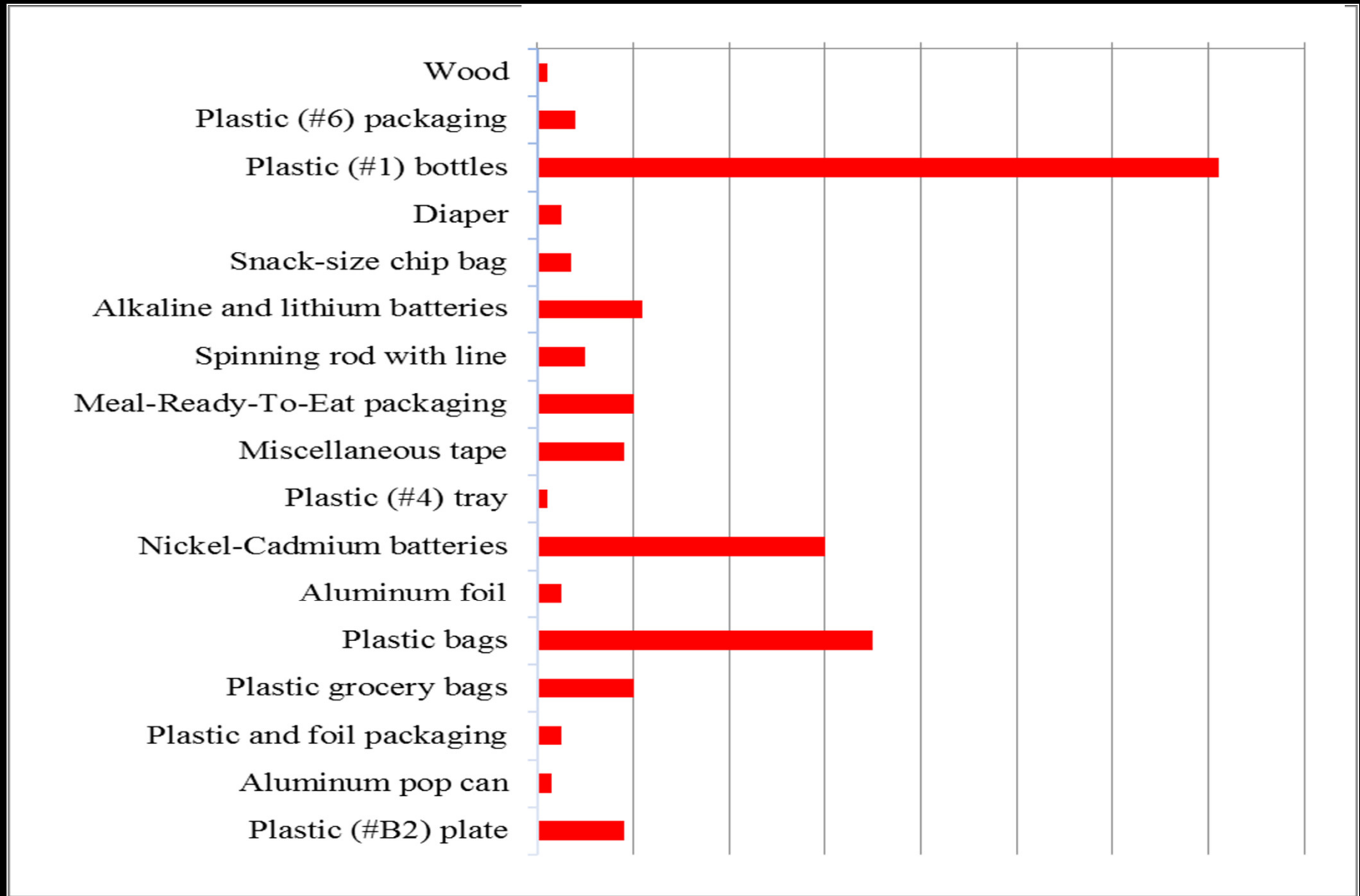


Pollutants

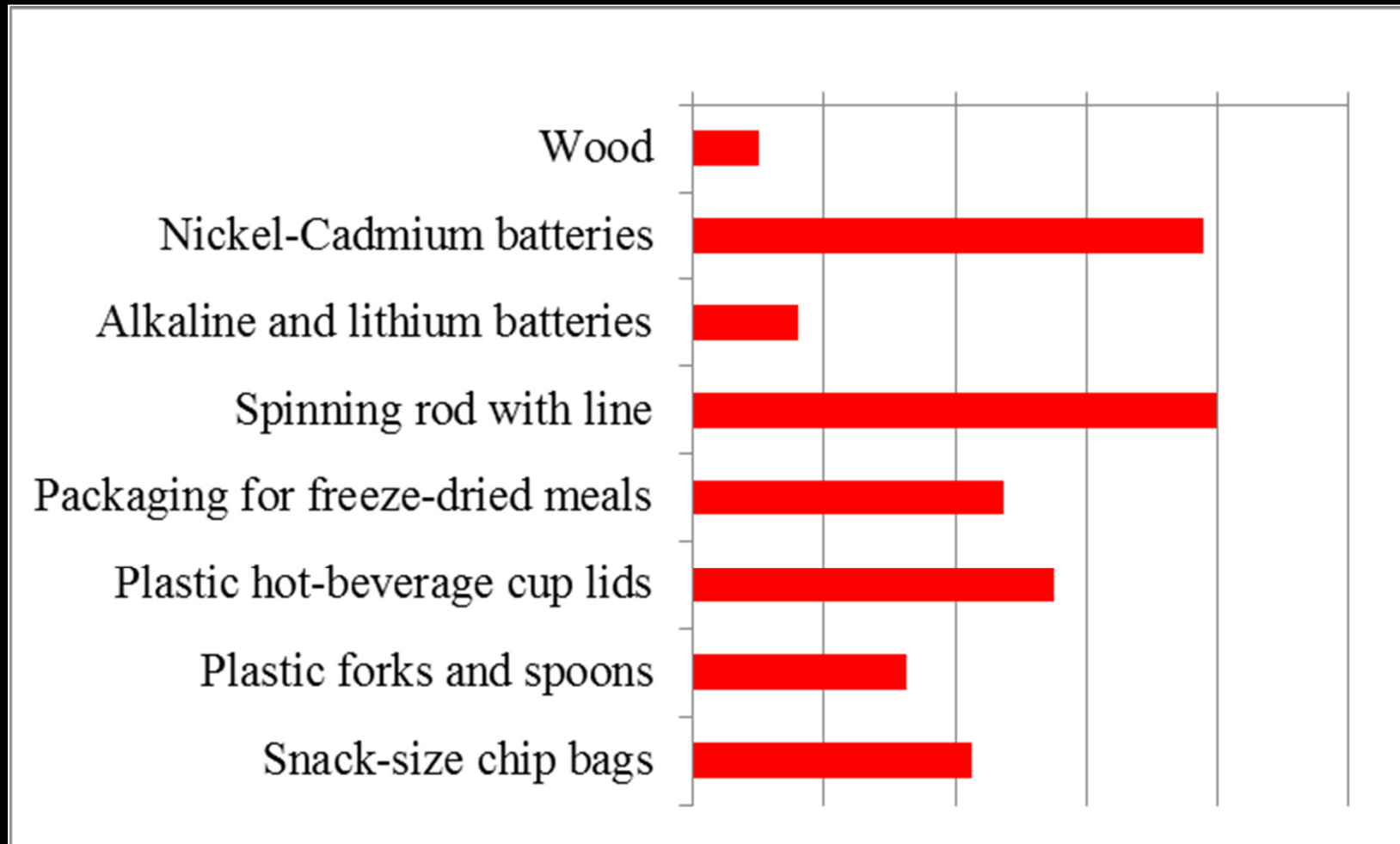
- ✓ *Dioxin*
- ✓ *Formaldehyde*
- ✓ *Carbon Monoxide*
- ✓ *Hydrogen chloride gas*
- ✓ *Mercury, Arsenic, Lead, Chromium, Cadmium*



Styrene in Smoke - Relative Amounts Compared to Just Burning Wood



Lead In Ash - Relative Amounts Compared to Just Burning Wood



Why Be Concerned?

Breathing - Smoke harms your health (& wildlife)

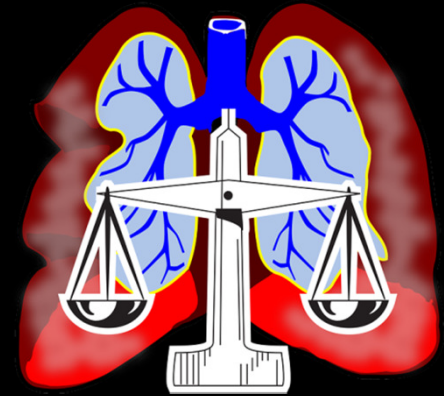
Ingestion - Chemicals are deposited on soil, food and water
- Bio-accumulation in fish, animals, and birds you eat

Ash - Pollutants contaminate soil and food
- Pollutants leach into drinking and surface water

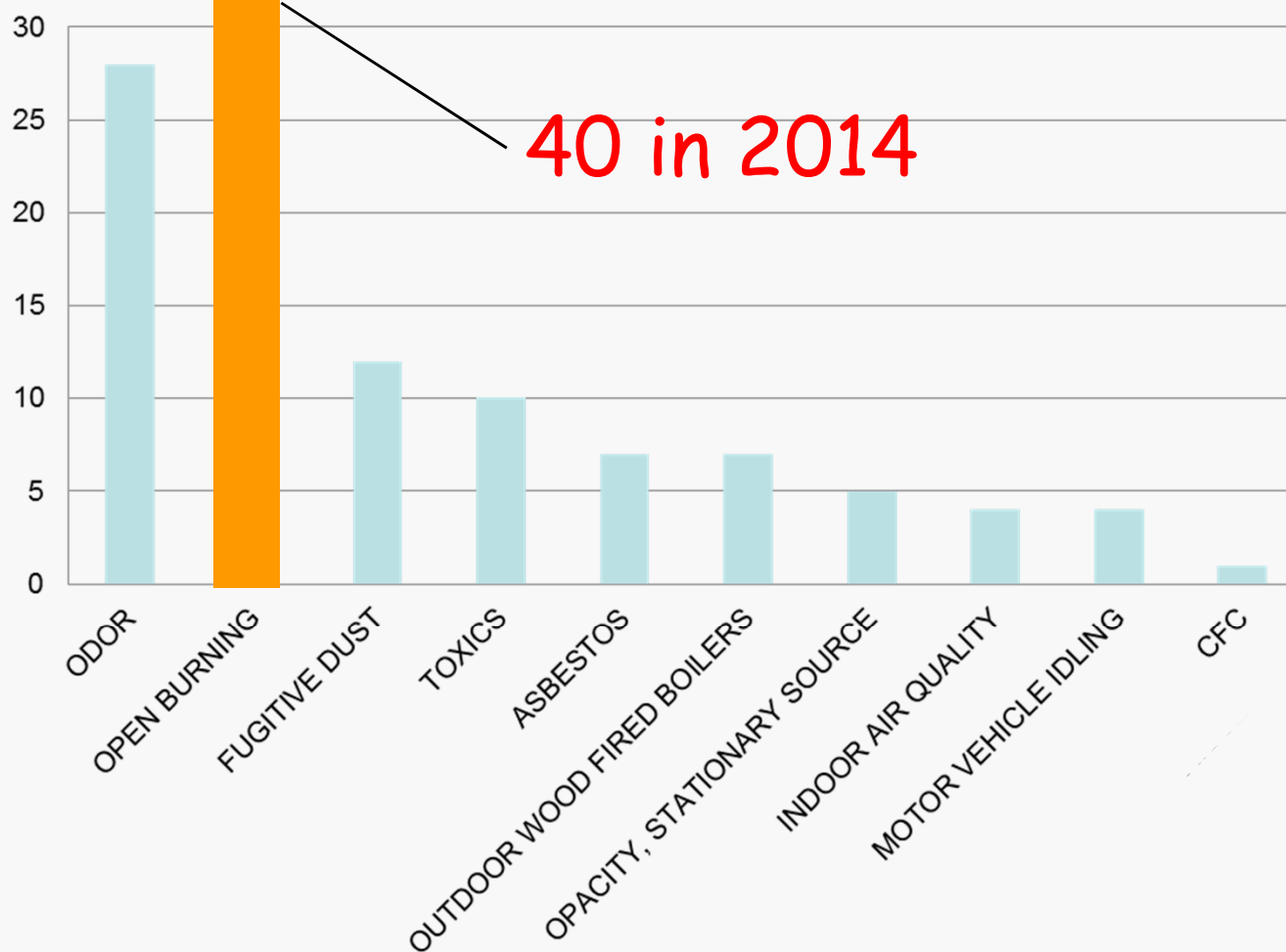
Haze - Smoke migrates onto your neighbors property
- Smoke contributes to regional haze

Health Impacts!

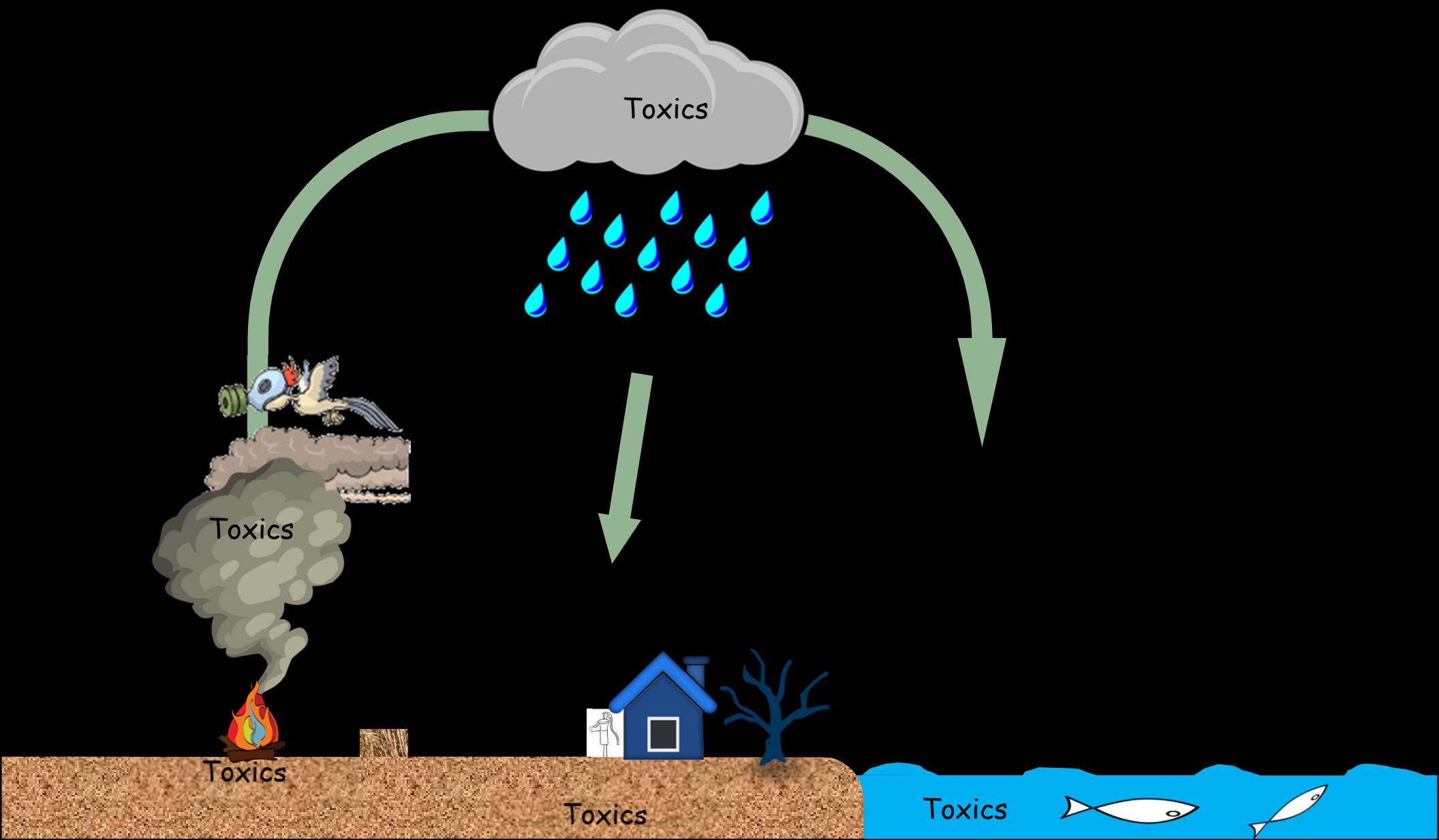
- ✓ Burning/watery eyes
- ✓ Skin rash
- ✓ Difficulty breathing
- ✓ Ulcerations of lungs
- ✓ Asthma attacks
- ✓ Kidney and liver
- ✓ Heart Disease
- ✓ Neurological
- ✓ Cancer



2016 Complaint type & Quantity







Open Burning Laws & Regs

RSA 125-C: *Air Pollution*

RSA 125-N: *Dioxin Reduction Program*

Env-A 1001: *Open Burning*

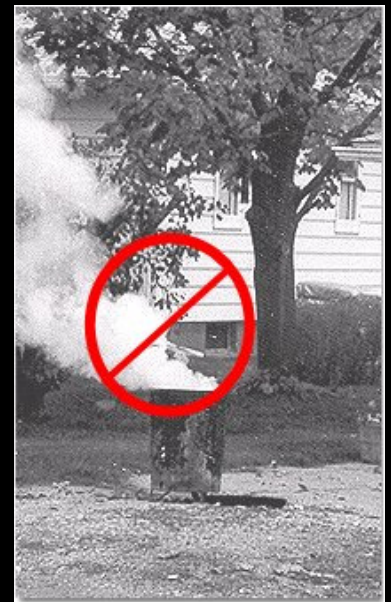
History of Open Burning Laws and Rule

1973 Rules in Effect, No Burning Tires

- *Env-A 1001*

2001 Banned Residential Trash Burning

- *RSA 125-N*
- *Env-A 1001 .06*



History of Open Burning Laws and Rules

2008 Banned the Burning of
the Clean Wood
Component of C&D.

- *RSA 125-C:10-c*
- *Env-A 1001 .06*



Prohibited Materials

- ✓ Combustible Domestic Waste (*Env-A 1001.06*)



Prohibited Materials

- ✓ Construction and Demolition Debris (*Env-A 1001.09*)



Prohibited Materials

✓ Treated Wood (*Env-A 1001.05*)

Applies to any dimensional lumber, plywood, brush, fire-wood, pallets, cordwood, etc.

Cannot be Painted, Stained, Pressure treated, Glued, Oily, Etc.



PT &
Painted

Prohibited Materials

✓ Tires and Tubes (*Env-A 1001.07*)



Prohibited Materials

✓ Salvaging Operations (*Env-A 1001.08*)







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C&D Exemptions!



Solid Waste Transfer Station Exemption

RSA 125 C:10-c

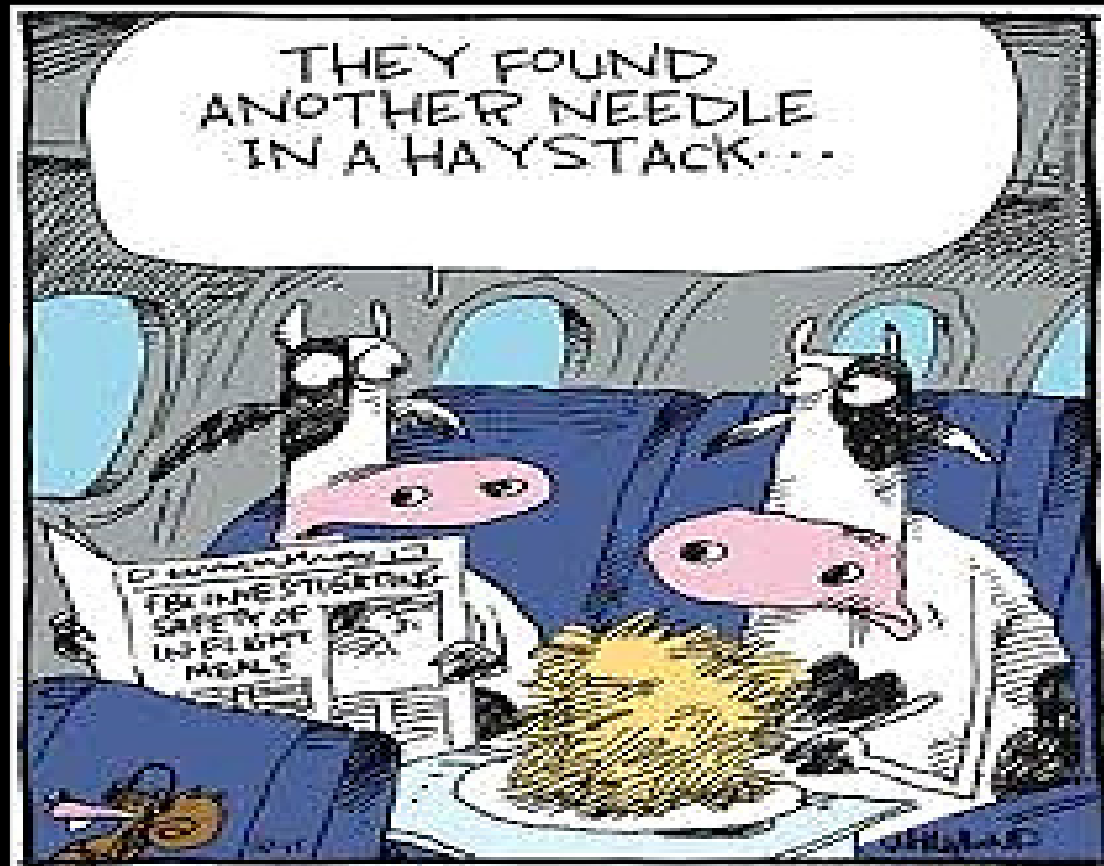
- 💣 Solid Waste Transfer Stations can burn the *incidental* clean-wood component of C&D.

RSA 125 C:10-c

This section shall not apply to the incidental combustion, under the supervision of a solid waste facility operator, of untreated wood at a municipal transfer station subject to regulation under RSA 149-M.

What Does **Incidental** Mean to You?

Occu
witho



nce or
ulation.

Homeowner Exemption

Env-A 1001.05(e)

💣 *A single-family homeowner can burn the clean-wood component of C&D.*

Env-A 1001.05(e)

On-site burning, by the owner of a private, single-family residence occupied by the owner, of clean (untreated) wood, provided the material originates on-site.

*Not your second home
Not your vacation home
Not your rental property*

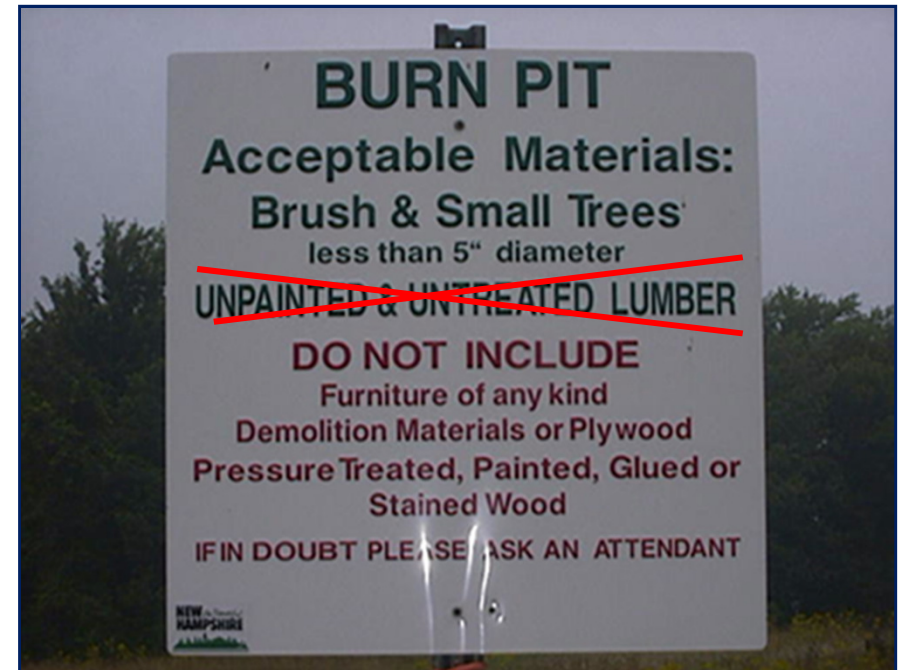
Acceptable Things



*You guessed it! Nothing Painted, Stained,
Pressure treated, Glued, Oily, Etc.*



Helpful Signs







BURN PILE
The only allowable material is
brush with 1" diameter or less
and unseasoned lumber.
No treated lumber.

A photograph of a burnable material pile in a wooded area. The pile consists of brush and clean lumber. A sign is placed in front of the pile, listing rules for what is allowed and not allowed. The sign is white with black text and a red border. The background is a dense forest of green trees. The foreground is a gravel or dirt area.

**BURNABLE
MATERIAL**
BRUSH UP TO 3" DIA.
CLEAN LUMBER
ONLY
NO LIMBS OVER 4" DIA.
NO SHIP LUMBER & T&L
NO PAINTED COMPOUND
NO PAINTED MATERIALS
NO T&L OR L&L WOOD
NO COMPOSTS
NO TRASH

Starting a Brush Fire



Starting a Brush Fire



No:

- Motor Oil
- Petroleum (i.e., Gasoline, Diesel, Kerosene, etc.)
- Hazardous-Wastes
- Vegetable Oil
- Coated Paper





Sitting in a 3.8-metre sea
kayak and watching
a four-metre great
white approach you is
a fairly tense experience

dairishare

Help Your Residents and
Help The Environment!



Best Management Practices

- ✓ *Inspect Delivery of Materials*
- ✓ *Instruct Residents on What's Acceptable*
- ✓ *Periodically Inspect Burn Pile*
- ✓ *Use Alternatives to Burning*
- ✓ *Start Brush Fire Correctly*





Thanks For All Your Efforts to
Protect the Air We Breathe!



Demolition/Renovation Projects Asbestos Hazards

NHDES receives 1200 demolition/renovation notifications per yr.



Homeowners can do their own asbestos abatement work...

Note:

- ◆ Only applies to single-family owner occupied residence. Must not be sold for six months after asbestos abatement.
- ◆ Must still follow the work practices, properly package, and properly dispose of the ACM per Env-A 1800, as would a Certified or Licensed contractor.

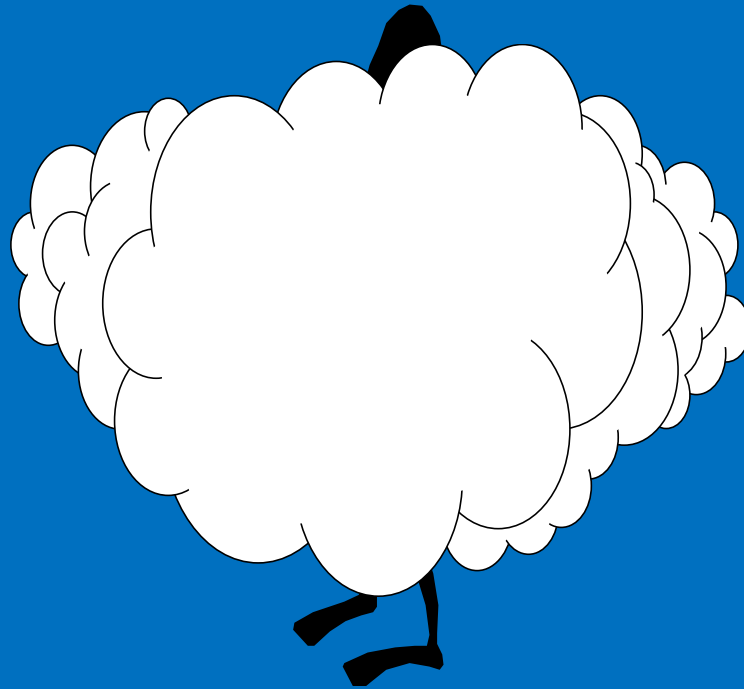


Asbestos

- Naturally Occurring Mineral
- Most Common Types
 - ✓ Chrysotile (Fibers)
 - ✓ Amosite (Needles)
 - ✓ Crocidolite (Needles)



Inhaling asbestos fibers can cause serious health effects. Fibers can be deposited within the lungs.



Hazardous Air Pollutant

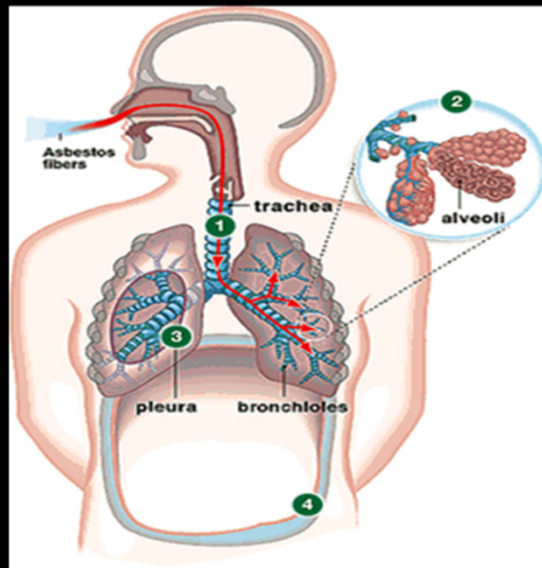
First & Second Hand Exposure

- ✓ You (inhalation, clothing, shoes)
- ✓ Your Co-Workers
- ✓ Residents
- ✓ Family and Friends



Types of Diseases

- Lung cancer
- Mesothelioma
- Asbestosis



Asbestos Fibers Will Lodge Deep in Lungs

10 to 40 years
before symptoms

Some Common Products Containing Asbestos

- ✓ *Vinyl Flooring - tile/sheeting, backing & mastics*
- ✓ *Boiler & Pipe Insulation and Cements*
- ✓ *Transite (Siding, Roofing, Pipe, etc.)*
- ✓ *Asphalt Roofing Materials*
- ✓ *High Temperature Gaskets*
- ✓ *Caulking and Putty*
- ✓ *Dry Wall, Plaster & Joint Compound*
- ✓ *Friction Devices*
- ✓ *Vermiculite*

Did You Know?

You can still purchase products
that contain asbestos!!

Read The Product Labels!

Vinyl Floor Tile



Ceiling Tile



Roofing



Shingles



Flashing/Caulking



Insulation



Concrete or Asphalt Cements

Asbestos in the Waste Stream









BMP - Asbestos Waste

Ask the Resident/Contractor:

- ✓ *Where did the waste material come from?*
- ✓ *Was an asbestos survey completed before beginning the demolition/renovation project?*
- ✓ *If so, was all asbestos properly removed and disposed of before bringing the waste to the transfer station?*
- ✓ *How old was the building from which the waste came from?*

If you have any concerns:

- *Do not accept the waste.*
- *Handout NHDES' Asbestos Brochure.*
- *Direct them to Contact NHDES for assistance.*

