



Open Burning Smoke Control Regulation

(BC Reg 145/93)

and Permits / Approvals

Burns Lake, Sept 11th, 2006

Ben Weinstein

Air Quality Meteorologist



Ministry of
Environment



www.bvldamp.ca

Overview

▶ Open Burning

- Overview
- Environmental Management Act (formerly Waste Management Act)

▶ OBSCR

- Does it apply
- Code of Practice
- Authority of a director

▶ Air curtain burners

Overview

- ▶ The issue: Open burning is used as a tool in land clearing for urban and rural development & to dispose of waste



Overview

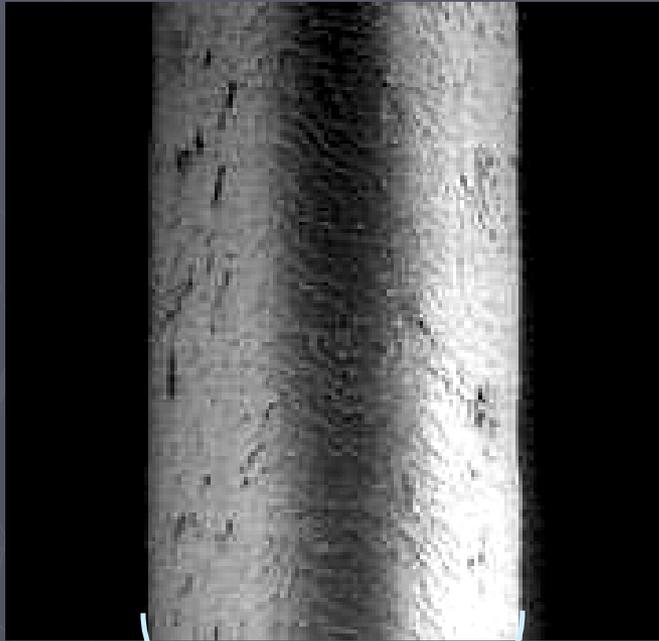
- ▶ The problem: Open burning emits many pollutants, one of which is particulate matter (PM).
- ▶ The accumulation of PM before and during poor venting conditions creates air quality and health problems.
- ▶ Scientists have yet to determine a PM threshold level.



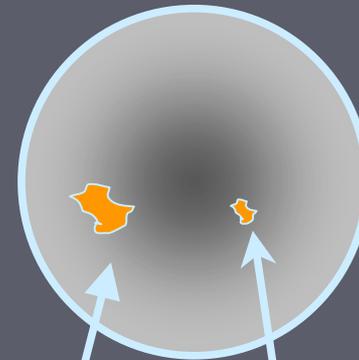
Smoke & Particles: What Are They?

Airborne particles, PM are a complex mixture of extremely small solids and liquid droplets

Hair cross section ($70\ \mu\text{m}$)



Human Hair ($70\ \mu\text{m}$ diameter)



PM_{10}
($10\ \mu\text{m}$)

$\text{PM}_{2.5}$
($2.5\ \mu\text{m}$)

Environmental Management Act

- ▶ Waste Disposal, Section 6
 - 6 (5) Nothing in this section...prohibits any of the following:
 - ▶ (a) ...the disposition of waste in compliance with this Act and with...
 - (i) a permit
 - (ii) an approval
 - (iii) an order
 - (iv) a regulation
 - (v) a waste management plan

Open Burning

- ▶ The Ministry has the mandate to manage smoke and emissions from open burning of land clearing debris
- ▶ The Open Burning Smoke Control Reg (OBSCR) attempts to address this
 - Deposited in 1993
 - Currently under review (my next year presentation will be different)

OBSCR

- ▶ The Open Burning Smoke Control Reg
 - When burning in compliance with OBSCR, exempt from needing a permit
 - Is considered the minimum standard
 - Those who cannot comply must apply for a permit or approval from the Ministry
 - Usually MoE permits set more stringent standards than the OBSCR

OBSCR

► Does it apply?

- The debris is burned on the parcel of land from which it originated
- Substances which normally emit dense smoke, noxious odours + prohibited material are not included in the burn
- Reasonable alternatives for reducing, reusing, recycling have been pursued
- No fire protection burn ban in place
- Complies with municipal bylaws

OBSCR

- ▶ Does it apply...cont'd
 - Set back distances obeyed
 - ▶ 100m from neighbour
 - ▶ 500m from schools, hospitals, continuing care facilities
 - Smoke must not pose a hazard at airports or on highways by reducing visibility
- ▶ If any of these are not met then a permit is needed from MoE to burn the debris (in some cases burning may not be the best option)

Prohibited Materials

- ▶ The OBSCR has a list of materials which are prohibited to be burned

tires

treated lumber

plastics

drywall

railway ties

manure

rubber

paint

asphalt

demolition waste

asphalt products

hazardous waste

biomedical waste

fuel containers

tar paper

- ▶ Contravention is an automatic appearance notice.

OBSC CoP

- ▶ Other factor: the Open Burning Smoke Control Code of Practice is followed
 - Category B area: smoke release period not greater than 96 hours
 - Favourable weather for ignition:
 - ▶ Follow venting requirements
 - Good on ignition
 - Good / Fair on day following
 - ▶ Local air flow will not cause smoke to negatively impact a nearby population
 - Must stop adding debris if:
 - ▶ Venting becomes poor
 - ▶ Winds do not disperse smoke

OBSC CoP

- ▶ It is the responsibility of the person conducting the burn to ensure that the burn complies with the parameters of the OBSCR and the Code of Practice (including proper venting conditions)

Authority of the Director

- ▶ If, in the opinion of the director (represented by the Regional Manager) pollution is or may occur from open burning of land clearing debris:
 - Suspend the exemption for not needing a permit to open burn (valid for 1 month or 7 days)
 - Require that fire be extinguished
 - Require that no additional material be added to the pile



9 1:40PM

Air Curtain Burners

- Is a permit required?



Air Curtain Burners Con'd

- ▶ “open burning” means the combustion of material with or without control of the combustion air and without a stack or chimney to vent the emitted products of combustion to the atmosphere
- ▶ No permit is required so long as the burn follows all the requirements and CoP of the OBSCR. (set back distances, good venting, etc...)

Conclusion

- ▶ Open burning is a tool used to dispose of land clearing debris & other waste
- ▶ It creates smoke which is an environmental and health concern (scientists have not determined safe threshold)
- ▶ Ministry uses regulations and permits to manage emissions from open burning
- ▶ Complying with the OBSCR (minimum standard) is the least complicated.