



Ministry of
Environment and
Climate Change Strategy

Open Burning Smoke Control Regulation (OBSCR): Update for Stakeholders

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Ministry of
Environment and
Climate Change Strategy

Purpose and Outline of Webinars

Changes are proposed to the Open Burning Smoke Control Regulation (OBSCR). The ministry wants to:

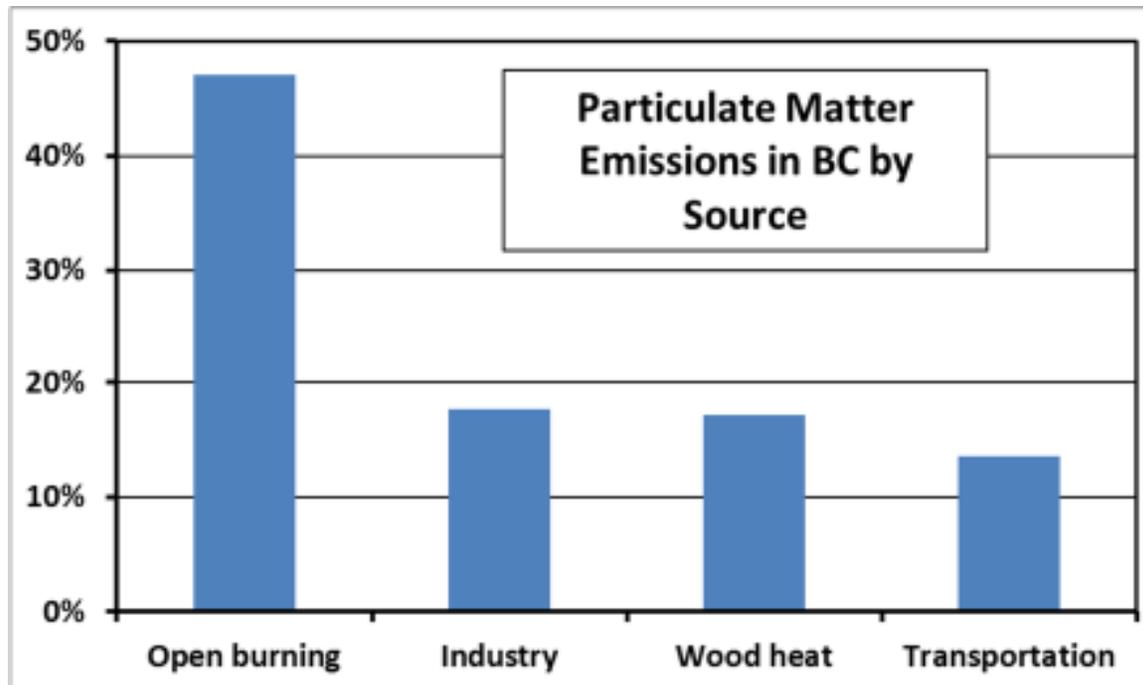
- Share information on proposed changes with stakeholders
- Receive feedback and answer questions

Outline:

1. Background on open burning in BC
2. The existing regulation
3. Proposed changes
4. Next steps
5. Questions and comments

What is the issue with open burning?

- Open burning is the largest source of fine particulate matter (PM_{2.5}) pollution in BC. It can contribute to poor air quality in communities.



Open burning impact on air quality in BC

- Six BC Communities exceed national air quality standards (3 on Vancouver Island, 3 in the Central Interior).
- Open burning has been identified as a significant contributor to poor air quality in these communities (along with residential wood smoke).
- In many communities annual pollution levels peak in November coinciding with an active period for open burning.



Satellite derived open burning plume
in Central BC, November 2017

The existing regulation – How does OBSCR work?

- Introduced in 1993
- Open burning is a “prescribed activity” under the *Environmental Management Act (EMA)*
 - This means the activity requires authorization to take place legally
 - Following the provisions of OBSCR authorizes the activity
- Other relevant legislation:
 - Wildfire Act and Regulation
 - Local Government Bylaws

How does the OBSCR work?

- OBSCR does not generally forbid burning
 - Provisions are mainly about burning in times and places where smoke impacts will be reduced.
- Ventilation index – Burning when the pollution will disperse
- Setbacks - Burn away residences, schools, hospitals
- Zones with different burning rules – Stricter rules near communities
- Length of burn period – Shorter burn periods lower the risk to air quality
- Requirement to investigate alternate uses – Burning is last resort
- Prohibited materials – Burning only vegetative debris
- Director's authority to temporarily ban burning



Applicability of OBSCR

- Applies to most open burning in BC.
- Burning at permanent facilities (log sorts for example) sometimes authorized by permit.
- Certain types of open burning are not regulated under EMA or OBSCR:
 - Certain domestic and agricultural burning,
 - training fires under an order of a local assistant, as defined in the *Fire Services Act*,
 - fire control under section 9 of the *Wildfire Act*,
 - resource management open fires under the *Wildfire Act* , used in accordance with that Act and the regulations under that Act.

Objectives of review

- Improving AQ in communities
- Providing flexibility for burning that is necessary for community wildfire protection
- Simplifying burning requirements in remote areas
- Encouraging cleaner technology
- Improving enforceability
- Bringing the regulation up to date

Information on OBSCR review

<http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/policy-legislation/legislation-regulation/environmental-protection-regulatory-review/open-burning-smoke-control-regulation>



Current status:

- Latest OBSCR review proposal shared via an intentions paper in 2016.
- Currently preparing maps of smoke sensitivity zones that would be a schedule to the regulation.
- The 2018 proposal keeps most of the features of the 2016 proposal with one important change.

Risk based requirements proposed in 2016

- Province proposed to be divided into three smoke sensitivity zones (high, medium and low)
- High Smoke Sensitivity Zone around all communities meeting a population density criteria
- Medium Smoke Sensitivity Zone around small communities not meeting the above criteria, rural areas, and transportation corridors
- Low Smoke Sensitivity Zone – rest of the province, locations distant from communities (>20 km generally)
- **Strictest burning requirements in the “High” zone, least strict requirements in the “Low” zone**

Other Important OBSCR changes proposed in 2016

- New provisions to facilitate burning required for “community wildfire protection”
- New provisions for burning diseased debris
- Changes to setbacks
- Provisions for air curtain incinerator use
- Flexibility to vary requirements through substitution orders
- Scoping exemptions for backyard burning and agricultural burning

CURRENT OBSCR

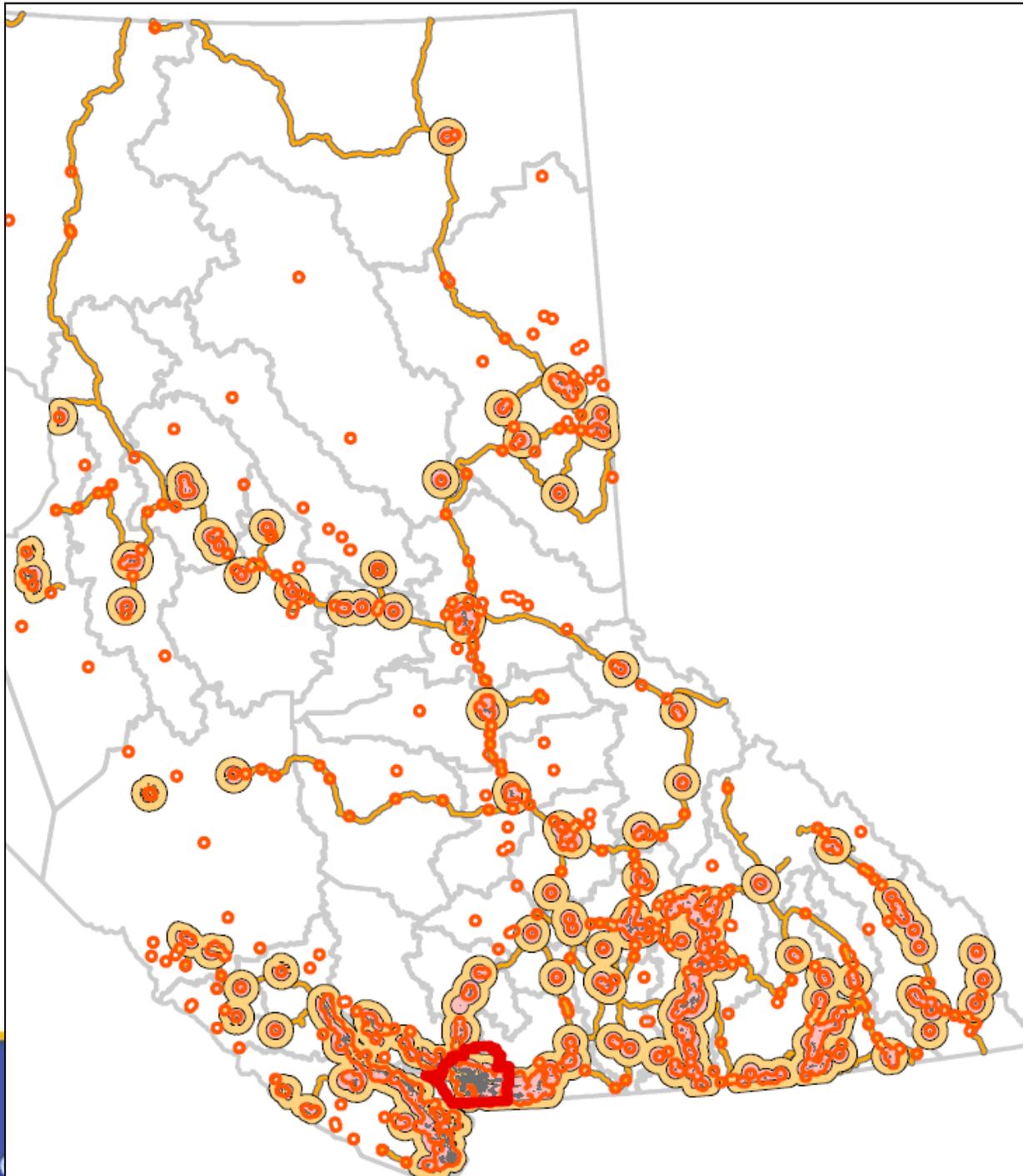
2018 PROPOSAL

Side by side comparison of provisions in the current proposal to provisions in the OBSCR that currently apply

Smoke Sensitivity Zones

- Cities, towns and villages = Category A
- Everything else = Category B

- High Smoke Sensitivity Zone – 10 km around densely populated areas – to be modified based on topography
- Medium Smoke Sensitivity Zone –
 - 10 km buffer around the HSSZ
 - buffer around other small gazetted communities and areas of rural settlement
 - buffer around provincial numbered highways
- Rest of province is Low Smoke Sensitivity Zone
- **Approximate Result HSSZ <5%, MSSZ <15% and LSSZ > 80%**



Preliminary mapping of smoke sensitivity zones

- Identification of population centres and transportation corridors
- As shown – 5% of land area is zoned “high”, 12% is zoned “medium”, 83% is zoned “low”

Burning in the High Smoke Sensitivity Zone

- 72 hour burns (Category A)
- Ventilation Index (VI) Good / Fair
- 4 burns per year, 15 days between burns

- One day burn with Good VI or
- Two day (sunrise Day 1 to sunset Day 2) burn with VI Good on the ignition day and Fair or Good on the next day
- Ignition during daylight hours
- Max 4 burn periods per year on smaller private land parcels
- **Requiring rapid burns during periods of good venting around populated areas is the key measure to reduce human exposure to smoke.**

Burning in the Low Smoke Sensitivity Zone

- 96 hours
- Good VI Day 1
- Fair or Good VI Day 2

- Ventilation Index Fair or Good day 1, Fair or Good day 2
- No limit to burn duration
- No set times for ignition
- Proposed VI requirements would allow roughly 1.5 to 2 times more “burn” days than the current requirements.
- Use of custom venting forecast also increases “burn” days

Burning in the Medium Smoke Sensitivity Zone

- 96 hours (Category B)
- Ventilation Index Good on day of ignition
- Ventilation Index Good or Fair on the day after ignition

- Same requirements as under current regulation

OBSCR

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Summarized Burning Requirements

	High Smoke Sensitivity Zone (HSSZ)	Medium Smoke Sensitivity Zone (MSSZ)	Low Smoke Sensitivity Zone (LSSZ)
Current OBSCR	Ventilation index requirements and burn periods are the same province-wide except within municipal boundaries. Good VI day of ignition. Good or fair VI next day. 96 hour burn period.		
2016 proposal	Shorter burn periods (32 hours), good VI day 1, good or fair VI day 2	Fair VI, 72 hour burn period	No ventilation index requirement
2018 Proposal	Same as 2016	Same as current OBSCR	Fair ventilation, unlimited burn period

Why was the 2016 proposal changed?

- New evidence from satellite and ground observations of distant smoke impacts.
- Concerns from communities
- Required expansion of the high smoke sensitivity zone

Smoke Management Plans

- No sound legal basis for current smoke management plans under the existing OBSCR

- Director would be given “substitution” powers which could be used to:
 - Recognize existing smoke management plans
 - Enable new smoke management plans where need exists
 - Vary provisions of the regulation in special circumstances
- Foresee less need for SMPs thanks to the relaxed venting requirements in the LSSZ.
- But still great flexibility to deal with situations where the requirements of OBSCR are not protecting the environment or where there are different ways of meeting the intent of the regulation

Setbacks

- 100 metres from residence or business
- 500 metres from schools, hospitals, continuing care facilities
- These cannot be relaxed or varied in the current OBSCR

- 500 metres from residence or business
- 1000 metres from schools, hospitals, community care facilities

But:

- General provision for 1 day burn with current setbacks
- Reduced setbacks available for community wildfire protection plan burning (50 metres)
- Reduced setback for burning diseased vegetative debris (50 metres)
- Reduced setback for air curtain incinerators (100/500 metres)
- Could be varied by a substitution order

Burning at Log Sorts

- By EMA Section 14 permit only

- In HSSZ – by EMA Section 14 permit
- 0 to 5 km from HSSZ – using air curtain incinerators
- 5-25 km from HSSZ and in balance of MSSZ – Must use auxiliary air to ignite and establish burn.
- Beyond 25 km from HSSZ and outside MSSZ – basic burn requirements.
- This applies to new log sorts!

Burning under Community Wildfire Protection Plans

- No additional flexibility

- One day burns under Fair ventilation index with only 50 metre setbacks
- Requires notification of nearby residences and businesses
- Director will also be able to issue an approval for specific wildfire protection burning.

OBSCR

proposed



Burning Diseased Vegetative Debris

- No additional flexibility

- One day burns under Fair ventilation index with only 50 metre setbacks
- Requires notification of nearby residences and businesses
- Director will also be able to issue an approval for specific burning of diseased vegetative debris.

OBSCR

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Burning in Air Curtain

Incinerators

- No additional flexibility despite much lower emissions.

- Between 100 meters and 1 km from residences may operate in Good or Fair Ventilation conditions.
- Beyond 1 km from residences may operate in any ventilation conditions.
- Director may issue permits or approvals.

OBSCR

Proposed

Directors Authority

- Director can prohibit open burning

- Director can prohibit open burning in two circumstances
 1. Air quality is exceeding or likely to exceed ambient air quality guidelines in an area.
 2. Open burning is causing pollution.
- Power to substitute requirements in regulation with different requirements
- Empowered to issue permits and approvals for certain burning.

Domestic and agricultural burning

- Unclear line between burning that is exempt from OBSCR and burning that is included in OBSCR

- Propose to have OBSCR provisions apply to any debris burning where the branches are greater than 10 cm diameter.

OBSCR

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Reporting

- No reporting requirements
 - Open burning has been tracked through the burn registration numbers.
- Regulation will empower reporting requirements for open burning but not bring them into effect
 - Would likely report Category 3 fires once per calendar year for the previous year.
 - Would enable better estimates of open burning emissions.
 - Delay implementation to ensure no duplication with other requirements.

Are the proposed OBSCR changes “banning” burning?

No:

Areas where it is now legal to burn, it will still be legal to burn.

Stricter requirements in the high sensitivity zone and within setbacks.

Flexibility to allow important burning to occur in places where it is currently not allowed (for fire protection and management of diseased debris).



Next Steps

- Complete draft sensitivity zone mapping and share with stakeholders – Spring 2018
- Complete regulatory drafting - Spring and Summer 2018
- Present regulatory proposal to Minister – Summer 2018
- If the regulatory proposal is approved new regulation could be in force as early as Fall 2018

Comments/questions?

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