



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

# Rulemaking for Flame Cap Kilns and Air Curtain Incinerators

Chapters 173-425, -430, -400 WAC

April 8, 2025

# Agenda

- 1** Welcome and Zoom functionality
- 2** Introduction and rulemaking overview
- 3** Flame cap kilns
- 4** Air curtain incinerators
- 5** Submitting written comments
- 6** Next steps

# Rulemaking about Flame Cap Kilns and Air Curtain Incinerators

## What

- Burning devices: definitions and usage
  - Chapter 173-400-050 General regulations for air pollution sources
  - Chapter 173-425 Outdoor burning
  - Chapter 173-430 Agricultural burning
- Reducing particulate matter (PM) emissions

## Why

- Substitute Senate Bill 6121
- Addressing burning permitting
- Reducing smoke in Washington

# What is a flame cap kiln?

## Flame cap kiln statutory definition (RCW 70A.15.1030)

(14) "Flame cap kiln" means an outdoor container used for the combustion of natural vegetation from silvicultural or agricultural activities that meets the following requirements:

- (a) Has a solid or sealed bottom including, but not limited to, mineral soils, so that all air for combustion comes from above;
- (b) Is completely open on top with no restrictions;
- (c) Is a shallow container where the width is greater than the height; and
- (d) Has a volume of 10 cubic meters or less.

# Areas of Interest – Flame Cap Kilns

## Adding statutory definition

- Modifying WAC (regulations) to match RCW (laws)
- Substitute Senate Bill 6121

## What kind of burning?

- Silvicultural and agricultural burning
  - Ecology only regulates agricultural burning
- Only burning that is already legal



Flame cap kiln example

(photo by Utah State University)

# What is an ACI?

## Air curtain incinerator

- Portable containers for burning woody debris from forestry operations
- May be more beneficial to air quality than open burning



## Air curtain incinerator example

(photo by North Coast Unified Air Quality Management District, California)

# Areas of Interest – ACIs

How will this new rule streamline permitting?

- Eliminate requirement for variance
  - Requires additional time, money, and resources

What is the current permitting process for air curtain incinerators?

- Apply for Notice of Construction permit (WAC 173-400-110)
  - Air quality permit – no change expected
- Apply for variance (WAC 173-400-050)
  - Proof of hardship
  - Additional cost
  - Mandatory public comment period; public can request a public hearing
  - EPA notification
  - Must re-apply every year

# For Both Flame Cap Kilns and ACIs

This rulemaking:

- will not change existing laws on what, where, and when burning is legal
- could lead to improved air quality in areas where open burning is common, since both devices produce fewer emissions than open burning for clean wood and agricultural waste
- may not impact Climate Commitment Act overburdened communities,<sup>1</sup> but more information may come out during the environmental justice assessment process

<sup>1</sup> <https://ecology.wa.gov/overburdened-communities>



# Environmental Justice

- Seeking feedback or concerns related to disproportionate impacts in Climate Commitment Act overburdened communities<sup>1</sup>
- Continuous environmental justice process during rulemaking

<sup>1</sup> <https://ecology.wa.gov/overburdened-communities>

# Next Steps

## Tentative timeline of upcoming rulemaking steps

Spring 2025

- Draft rule language

Summer 2025

- Hold more public meeting(s)

Fall 2025

- Propose rule, hold public comment period and public hearing

Winter 2025–Spring 2026

- Adopt rule

# Comment

- Informal public comment period

<https://aq.ecology.commentinput.com/?id=PjNaietgQ>

- Please submit your comments!
- Link also available via email.

# More Information

## Rulemaking web page

<https://ecology.wa.gov/wac-173-425-430-400>

## Contact

Caitlyn Roehmholdt, Rule Lead

[caitlyn.roehmholdt@ecy.wa.gov](mailto:caitlyn.roehmholdt@ecy.wa.gov) (best way to contact)

360-742-7554



# Thank you

Caitlyn Roehmholdt, Rule Lead  
[caitlyn.roehmholdt@ecy.wa.gov](mailto:caitlyn.roehmholdt@ecy.wa.gov)