



Air Quality Program Rulemaking:
Chapters 173-425, 173-430, and 173-400
WAC, Flame Cap Kilns and Air Curtain
Incinerators

**An Environmental Justice Assessment (per RCW
70A.02.060)**

By

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For the

Air Quality Program

Washington State Department of Ecology
Olympia, Washington

May 2026, Publication 26-02-012

Contact Information

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To request an ADA accommodation, contact Ecology by phone at 360-407-7554 or email at Caitlyn.roehmholdt@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

¹ www.ecology.wa.gov/contact

Language Access

Under the state Environmental Justice law (RCW 70A.02), Ecology is required to conduct Environmental Justice Assessments during development of certain significant actions. This Assessment provides information about the potential impacts to overburdened communities and vulnerable populations, and strategies to mitigate identified harms and fairly distribute known benefits. The Department of Ecology is committed to providing language services, including translation and interpretation, for people whose primary language is not English. To request these services, email EJ@ecy.wa.gov or call 360-489-2416.

Bajo la ley estatal de Justicia Medioambiental (RCW 70A.02), Ecología está obligada a realizar Evaluaciones de Justicia Medioambiental durante el desarrollo de ciertas medidas importantes. Esta evaluación proporciona información sobre los posibles impactos en las comunidades sobrecargadas y las poblaciones vulnerables, y las estrategias para mitigar los daños identificados y distribuir justamente los beneficios conocidos. El Departamento de Ecología está comprometido a ofrecer servicios de idioma, incluidos traducción e interpretación, para personas cuyo idioma principal no es el inglés. Para solicitar estos servicios, envíe un correo electrónico a EJ@ecy.wa.gov o llame al 360-489-2416.

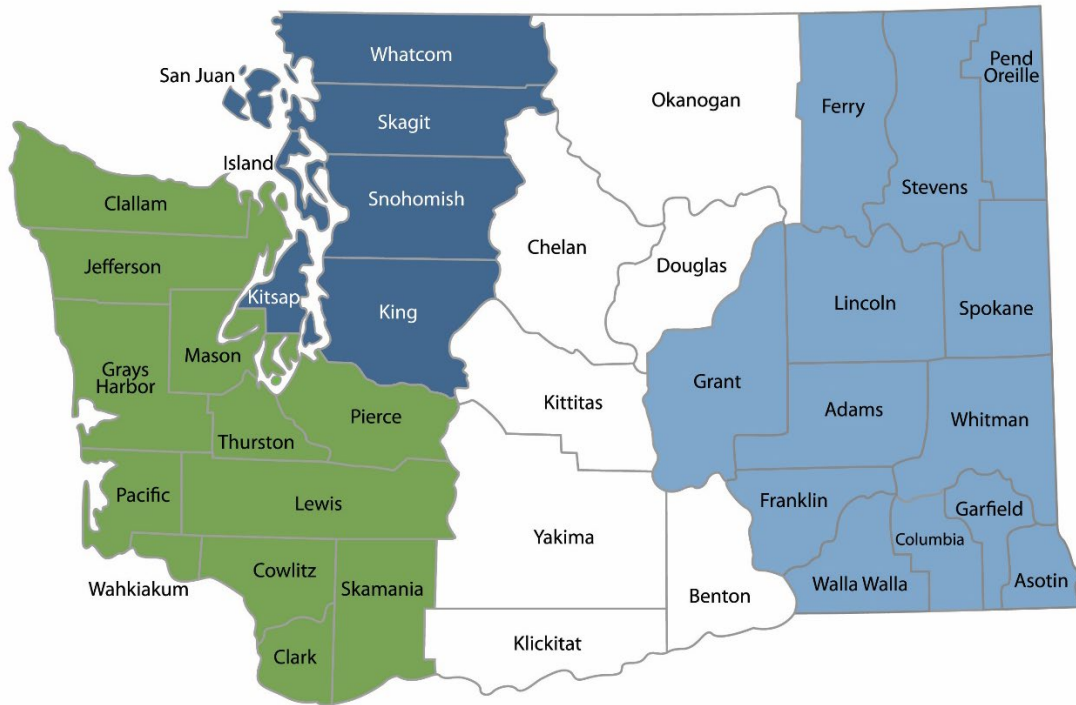
根据华盛顿州环境正义法(RCW 70A.02), 生态管理署在制定某些重大行动时必须进行环境正义评估。该评估需提供对负担过重社区和弱势群体潜在影响的信息, 以及减轻已明确的危害和公平分配已知利益的策略。生态管理署致力于为母语非英语的人士提供语言服务, 包括笔译和口译。如需求此类服务, 请发送电子邮件至 EJ@ecy.wa.gov 或致电 360-489-2416。

Theo luật Công Bằng Môi Trường của tiểu bang (RCW 70A.02), Bộ Môi Sinh được yêu cầu tiến hành Đánh Giá Công Bằng Môi Trường trong quá trình triển khai một số hành động quan trọng. Đánh giá này cung cấp thông tin về các tác động tiềm ẩn đối với các cộng đồng đang chịu tổn hại và các nhóm dân cư dễ bị tổn hại cũng như các chiến lược nhằm giảm thiểu tác hại đã xác định và phân chia công bằng các lợi ích đã biết. Bộ Môi Sinh cam kết cung cấp các dịch vụ ngôn ngữ, bao gồm dịch thuật và thông dịch, cho những người có ngôn ngữ chính không phải là tiếng Anh. Để yêu cầu các dịch vụ này, quý vị vui lòng gửi email đến EJ@ecy.wa.gov hoặc gọi 360-489-2416. Nếu gọi điện, quý vị hãy yêu cầu kết nối với một thông dịch viên.

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Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400
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Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	P.O. Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	P.O. Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 West Alder Street Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 North Monroe Spokane, WA 99205	509-329-3400

Region	Counties served	Mailing Address	Phone
Headquarters	Statewide	P.O. Box 46700 Olympia, WA 98504	360-407-6000

Air Quality Program Rulemaking: Chapters 173-425, 173-430, and 173-400 WAC, Flame Cap Kilns and Air Curtain Incinerators

An Environmental Justice Assessment (per RCW 70A.02.060)²

Air Quality Program
Washington State Department of Ecology
Olympia, WA

May 2026 | Publication 26-02-012



DEPARTMENT OF
ECOLOGY
State of Washington

² <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.02&full=true#70A.02.010>

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Executive Summary

This rulemaking will consider two amendments to the existing rule. First, it will explore adding the definition of “flame cap kilns” in rule to align with amendments made to RCW by Substitute Senate Bill (SSB) 6121 (2024 session). Adding the definitions will not change the existing laws on what, where, and when burning is legal. Second, this rulemaking will address the air curtain incinerator (ACI) permitting process. Current technology for air curtain incinerators makes it difficult to meet some emission limits, and therefore permit applications for ACIs require additional consideration and information. This requires additional work by the applicant and Ecology and additional time needed to issue the necessary permit. With proper siting criteria and operation standards, ACIs may still be more beneficial to air quality than open burning. This will also not change the existing laws related to burning. The area(s) most likely to be impacted if there is an increase in emissions are those where burning takes place frequently, such as the central and eastern regions of the state. In addition to the two potential amendments mentioned above, this rulemaking may also consider other amendments to these chapters to clarify language and improve regulatory requirements for air quality.

Environmental Justice Assessment

Purpose of the Environmental Justice Assessment

The Environmental Justice (EJ) Assessment process helps assess the environmental justice impacts of Significant Agency Actions (SAAs). The assessment informs and supports consideration of overburdened communities and vulnerable populations when making decisions. This information assists with the equitable distribution of environmental benefits, the reduction of environmental harms, and the identification and reduction of health disparities.

The EJ assessment process aligns with Washington’s Environmental Justice law called the Healthy Environment for All (HEAL) Act ([RCW 70A.02³](#)), as well as federal commitments in the [Performance Partnership Agreement⁴](#) with the EPA. The assessment process draws on best practices established in [Technical Guidance for Assessing Environmental Justice in Regulatory Analysis⁵](#) and [Promising Practices for EJ Methodologies in NEPA Reviews⁶](#).

Environmental justice assessments are to be completed for the following actions:

- The development and adoption of significant legislative rules as defined in RCW.05.328⁷
- The development and adoption of any new grant or loan program that a covered agency is explicitly authorized or required by statute to carry out
- A capital project, grant, or loan award of at least \$12,000,000 or a transportation project, grant, or loan of at least \$15,000,000
- The submission of agency request legislation to the office of the governor or the office of financial management for approval
- (Covered actions are expected to expand in 2025)

This assessment is not required to be a comprehensive or an exhaustive examination of all potential impacts of a significant agency action and does not require novel quantitative or economic analysis of the proposed significant agency action.

The time and resource investment, and depth of assessment, will be influenced by the reasonable applicability of the questions to the agency action.

Ecology plans to update this document and incorporate what we learn through practice, community engagement, Tribal consultation, and any guidance we may receive from the Environmental Justice Council.

This Environmental Justice Assessment is adapted for publication and does not include internal agency process instructions.

³ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.02&full=true>

⁴ <https://ecology.wa.gov/About-us/Accountability-transparency/Government-coordination/Partnering-with-the-EPA>

⁵ <https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis>

⁶ https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf

⁷ <http://app.leg.wa.gov/RCW/default.aspx?cite=34.05.328>

Section 1: Background

The information in this section is provided for the Office of Financial Management's [dashboard](#)⁸ which includes all covered agency's Environmental Justice Assessment notices.

1. Descriptive title of project/action:

Rulemaking: Chapters 173-425, 173-430, and 173-400 WAC, Flame Cap Kilns and Air Curtain Incinerators

2. Date EJ Assessment initiated:

October 24, 2024

3. Ecology Program/Office:

Air Quality

4. Point of contact for EJ Assessment:

Caitlyn Roehmholdt

5. Significant Agency Action type, select one or more:

Rulemaking

New grant or loan program

New capital project, grant, or loan of \$12 million or more

Request legislation

Other, explain:

6. Write a short summary of the action.

This rulemaking will consider two amendments to the existing rule. First, it will explore adding the definition of “flame cap kilns” in rule to align with amendments made to RCW by Substitute Senate Bill (SSB) 6121 (2024 session). Adding the definitions will not change the existing laws on what, where, and when burning is legal. Second, this rulemaking will address the air curtain incinerator (ACI) permitting process. Current technology for air curtain incinerators makes it difficult to meet some emission limits, and therefore permit applications for ACIs require additional consideration and information. This requires additional work by the applicant and Ecology and additional time needed to issue the necessary permit. With proper siting criteria and operation standards, ACIs may still be more beneficial to air quality than open burning. This will also not change the existing laws related to burning. The area(s) most likely to be impacted if there is an increase in emissions are those where burning takes place frequently, such as the central and eastern regions of the state. In addition to the

⁸ <https://ofm.wa.gov/budget/budget-related-information/agency-activities/environmental-justice-assessment-notices>

two potential amendments mentioned above, this rulemaking may also consider other amendments to these chapters to clarify language and improve regulatory requirements for air quality.

7. Identify the method(s) for the public to comment on this proposed action for this assessment.

Between April and July, 2025, three public meetings were held, during which time we opened the floor for Q&A and informal comments from the public. Oral comments during public hearings(s), electronically submitted comments, and comments submitted by mail were accepted. Additionally, postcard flyers about the rulemaking and how to participate were handed out at in-person events in Central and Eastern Washington, both in English and in Spanish.

A formal public hearing (January 6, 2026) and comment period (November 13, 2025-January 20, 2026) were held, and no environmental justice concerns were brought up to Ecology at those times.

8. Create/provide an Ecology webpage with information about this proposed action.

Provide link here: <https://ecology.wa.gov/regulations-permits/laws-rules-rulemaking/rulemaking/wac-173-425-430-400>

Section 2: Notification that an Environmental Justice Assessment has been Initiated

This section instructs Ecology staff to notify OFM about the initiation of the action.

Section 3: Identify Affected Tribes

This section summarizes preliminary planning for Tribal Consultation. Ecology must offer consultation with Tribes on significant agency actions that affect federally recognized Tribes' rights and interest in their tribal lands.

Preparing for Tribal Consultation

1. Is the proposed action likely to have any local or regional impacts to federally reserved Tribal rights and resources, including but not limited to, those protected by treaty, executive order, or federal law? Choose one of the following:
 - Yes
 - No
 - Unsure

2. List any federally recognized Tribes that are expected to be affected by the proposed action. If it is determined during consultation that Tribes do not wish to be included, then do not include them.

State outdoor burning laws do not apply to any outdoor burning on lands within the exterior boundaries of Indian reservations (unless provided for by intergovernmental agreement).

3. If it is determined at any other point in the process of the assessment that Tribes have self-identified as being potentially impacted by the action, then include them in the assessment and offer consultation.

None as of 6/24/2025

4. Describe plans to offer consultation to identified Tribes.

Letters offering consultation were sent to all tribes on 2/6/2025 and 11/13/2025. These letters contained information including an outline of the general rulemaking process and information about the goals of this specific rulemaking. The letters also included information about upcoming public meetings and contact information for the rulemaking lead.

Section 4: Offer Consultation:

This section directs Ecology staff to offer consultation with Tribes on significant agency actions that affect federally recognized Tribes' rights and interest in their tribal lands.

Section 5: Summary of Tribal Consultation & Engagement

Tribal consultation is intended to inform the answers to all questions in this section.

Summary of Tribal Consultation

1. Describe potential impacts (including harms and benefits) to federally recognized Tribal rights and interests in their tribal lands.

Consultation was not requested and no comments were received from Tribal representatives during informal or formal comment periods.

2. Describe potential impacts related to Tribal rights and interests that are not in Tribal lands?

Consultation was not requested

3. Summarize recommendations from Tribes to:
 - a. Mitigate or eliminate potential harms from the action
 - b. Equitably distribute benefits from the action

Consultation was not requested

4. Describe how consultation, engagement, and analyses of impacts to Tribes has informed the development of the action. If it has not, explain why.

Consultation was not requested

5. Describe any plans to continue consultation or engagement with Tribes related to this action.

Tribes are welcome and encouraged to contact the rulemaking lead or other Air Quality Program staff at any time with questions or concerns regarding the outcome of this rulemaking.

Section 6: Identification of Overburdened Communities & Vulnerable Populations

This section identifies overburdened communities and vulnerable populations, as identified in the [definitions of RCW 70A.02](#), who will be affected by the action.

Identify Overburdened Communities and Vulnerable Populations

1. Identify the geographic area(s) anticipated to be affected by the action.

All areas of the state may potentially be affected. Burning often takes place near overburdened communities ([as defined by the Air Quality program for the Climate Commitment Act Initiative](#)). This is because overburdened communities – especially in Central Washington – frequently overlap with agricultural activity in the state.

2. When applicable, using the [Washington State Department of Health’s Environmental Health Disparities Map \(EHD Map\)](#), identify the EHD Map rankings for all census tracts likely to be impacted by the action.

Any tract within Washington State may possibly be impacted, depending on burn location

3. From the rankings identified in question 2, are there any census tracts ranked 9 and 10?

Yes

No

If yes, describe.

Various census tracts in Ecology's jurisdiction in Central and Eastern Washington are ranked 9 or 10 for Sensitive Populations, Socioeconomic Factors, Environmental Exposures, and Environmental Effects on the Department of Health's Environmental Health Disparities Map. The majority of agricultural burning takes place in Central and Eastern Washington, so overburdened and vulnerable populations may be impacted depending on where burning takes place.

4. Please describe additional cumulative health considerations relevant to this action.

Both flame cap kilns and ACIs produce smoke, even though the emissions are less than the same fuel burned in a pile would create. All emissions are possible health concerns, but this technology would not cause any additional cumulative health considerations beyond what already exists.

5. Identify areas likely to be impacted by the action that are at or above the 80th percentile (in state) for the "People of color" and "Low income" socioeconomic indicators. You can do this by looking at the EHD map rankings for these individual indicators (rank 9 or higher roughly approximates those census tracts at or above the 80th percentile), and/or by downloading the appropriate data on these indicators from the [Washington Tracking Network](#) or the [Census Bureau's](#) American Community Survey 5-year estimates and running additional analysis to determine percentiles.

There is a possible correlation between the areas most impacted by burning in general (see question 2) and communities of people of color and/or low socioeconomic status. This is due to the overlap of areas of high agricultural activity ([Agricultural Land Use Map, WA Dept. Of Agriculture](#)) and areas with the aforementioned socioeconomic indicators. Because ACIs are mobile units and no one is required to use a flame cap kiln, it is not possible to definitively state who will be impacted by this rule in specific terms, only a general prediction of possibilities.

6. Using the EHD map and/or data from Washington Tracking Network, identify any other indicators pertaining to socioeconomic characteristics, health disparities, and/or climate and environmental impacts at or above the 80th percentile (in state) that are relevant to this action.¹

No other indicators have been identified as relevant to this rulemaking.

7. Identify additional overburdened communities and vulnerable populations that are likely to be affected by the action.

- Agricultural workers and others who work unprotected outdoors in impacted areas

8. Through community engagement, were additional overburdened communities and vulnerable populations identified who are likely to be affected by the action? Describe additional communities or populations identified, and the reasons they would be considered overburdened and vulnerable.

No additional communities were identified.

9. Through Tribal Consultation, were additional overburdened communities and vulnerable populations identified who are likely to be affected by the action?

Describe additional communities or populations identified, and the reasons they would be considered overburdened and vulnerable.

Tribal consultation was not requested.

Section 7: Summary of Community Engagement

This section summarizes community engagement activities. Community Engagement should be tailored to specifically reach overburdened communities and vulnerable populations.

Community engagement is required for all significant agency actions, but the engagement methods will vary depending on the size, scope, and topic of the project. The level, type, and form of engagement is based on the likelihood that the actions may cause environmental harm or may affect the equitable distribution of environmental benefits to an overburdened community or a vulnerable population.

Summarizing Community Engagement

1. Describe the engagement activities with identified overburdened communities and vulnerable populations.

Our communications team developed an informational postcard to hand out at events in the Central Eastern regions regarding the rulemaking and how people can get involved, including information about public meetings and links to the rulemaking website. This postcard was translated into Spanish to reach a larger population.

2. What actions were taken to help address barriers to meaningful engagement?

All 3 public meetings and the formal public hearing were held via Zoom, followed by posting both the presentation slides and a recording of the presentation on Ecology's rulemaking website. All meeting notices included Ecology's ADA statement and also information on how to request interpretation or translation.

3. Identify overburdened communities or vulnerable populations potentially affected by the action who were not engaged and explain why not.

While some outreach to the general public was done through an informational card and tabling, individuals not involved in the agricultural sector or silvicultural sector at an administrative level were possibly not reached, as were general citizens who are not on Ecology's mailing list. This is due to the nature of the rulemaking being mostly administrative. The rulemaking does not change any existing burning regulations, so intensive outreach was not needed.

4. Summarize recommendations from members of overburdened communities and vulnerable populations to mitigate or eliminate potential harms from the action and/or equitably distribute benefits from the action.

While Ecology invited input related to mitigating harms during public meetings, there were no recommendations specifically from members of overburdened communities and/or vulnerable populations received in the meetings or through the rulemaking comments portal.

5. Describe any plans for ongoing engagement with overburdened communities and vulnerable populations related to this action.

Once the rule is adopted, there will be no ongoing engagement for this rulemaking. However, we will continue to update the public of any rulemaking news through our GovDelivery and website.

Section 8: Potential Environmental Benefits & Harms from Action

This section summarizes anticipated benefits and harms from the potential action, and to assess impacts on overburdened communities and vulnerable populations. The level, type, and form of engagement is based on the likelihood that the actions may cause environmental harm or may affect the equitable distribution of environmental benefits to an overburdened community or a vulnerable population. Answers to the questions in this section may have helped in strategizing our approach to engagement.

Identify Potential Environmental Benefits & Harms from Action

1. Describe the anticipated benefits (direct and/or indirect) from this action.

There may be fewer emissions from burning, depending on the device used and operator training and skill.

2. Who will primarily benefit from this action?

Agricultural and silvicultural burners, those applying for air curtain incinerator permits, Ecology permitting staff. Additionally, if the use of these devices becomes more widespread, overburdened and vulnerable communities may experience fewer emissions from burning.

3. How is the action expected to benefit specifically overburdened communities or vulnerable populations? If there is no benefit, identify potential barriers to benefitting from the action.

These devices produce fewer emissions than traditional pile burning, which increases air quality, especially for those living and working closest to the burning of slash and other organic material. Streamlining the ACI permitting process directly benefits those who

face barriers to applying for a permit and indirectly benefits those impacted by air pollution and wildfire threat.

4. Describe anticipated harms (direct and/or indirect) from this action.

No harms are anticipated

5. Who will primarily experience the harms?

N/A

6. Describe how the action may harm overburdened communities or vulnerable populations? Be as specific as possible.

No harms are anticipated

7. Describe how the action would address environmental and health disparities.

Allowing for cleaner burning devices can benefit underserved populations by decreasing emissions in areas of high risk for air pollution.

Section 9: Options to Eliminate, Reduce, or Mitigate Harms and Equitably Distribute Benefits

This section summarizes options identified for eliminating, reducing, or mitigating harms, as well as options for equitably distributing anticipated benefits. The answers in this section should be informed by engagement, answers from the previous subsections, and any legislative or regulatory boundaries that limit possible decision making.

Identify Options to Eliminate, Reduce, or Mitigate Harms & Equitably Distribute Benefits

1. Describe options to reduce, mitigate, or eliminate the identified probable harms to overburdened communities and vulnerable populations; and options to equitably distribute the benefits.

No harms identified

2. Describe methods chosen for this action to reduce, mitigate, or eliminate the identified probable harms to overburdened communities and vulnerable populations; and methods chosen to equitably distribute the benefits. You must consider the following methods, but are not limited to them:

- Eliminating the disparate impact of environmental harms on overburdened communities and vulnerable populations;
- Reducing cumulative environmental health impacts on overburdened communities or vulnerable populations;

- Preventing the action from adding to the cumulative environmental health impacts on overburdened communities or vulnerable populations;
- Providing equitable participation and meaningful engagement of vulnerable populations and overburdened communities in the development of the significant agency action;
- Prioritizing equitable distribution of resources and benefits to overburdened communities;
- Promoting positive workforce and job outcomes for overburdened communities;
- Meeting community needs identified by the affected overburdened community;
- Modifying substantive regulatory or policy requirements; and
- Any other mitigation techniques, including those suggested by the council, the office of equity, or representatives of overburdened communities and vulnerable populations.

No harms identified

3. If the agency determines it does not have the ability or authority to eliminate, reduce, or mitigate environmental harms caused by the action, or address the equitable distribution of environmental benefits, explain why that determination was made.

No harms identified