

Date: Dec. 31, 2024
To: Environmental Quality Commission
From: Leah Feldon, Director
Subject: Agenda item H, Informational item: Smoke Mitigation Efforts in Oregon
Jan. 9-10, 2025, EQC meeting

Why this is important DEQ and OHA will provide an update on ongoing smoke mitigation and wildfire resilience efforts being taken at the local, state and federal level to address impacts from wildfire and prescribed fire smoke and the impacts to public health.

Background Oregon is facing increased risk from wildfires, with 1.9 million acres burning in 2024. Much of Oregon experiences dry summers, with high temperatures, low humidity, and strong winds that create ideal conditions for wildfires. Mitigation efforts adopted by the state include increasing the pace and scale of prescribed fire, mechanical fuels reductions, and community preparedness to reduce wildfire risks and public health impacts. Addressing wildfire risk requires a multi-pronged approach. In Oregon, the Smoke Management Rules act as the vehicle for collaboration and coordination to protect air quality and public health while necessary prescribed burning continues to occur. The rules encourage forestland owners to use alternatives to burning, including providing resources for alternate approaches and markets for biomass utilization in [OAR 629-048-0200](#). Coordination between burners, local public health, and the public is promoted through the creation of Community Response Plans (CRP) and the ability of a community to apply for a one-hour exemption if they have an approved CRP and exemption request.

Content being presented Prescribed burning is an important tool in reducing wildfire risk. [The Wildfire Programs Advisory Council Annual Report for 2024](#) highlights the need to increase the use of beneficial fire in Oregon while protecting public health. The report also notes the importance of expanding smoke mitigation programs and removing fuels through treatments and techniques that do not involve burning, especially reducing pile burning. To mitigate the impacts of prescribed fire smoke on Oregon communities, the Smoke Management Plan (SMP) was developed in 1969 and adopted as a regulatory program in 1972. The Smoke Management Rules are updated, at a maximum, every 10 years. The next review and update is planned for 2025. A five-member advisory committee, the Smoke Management Advisory Council (SMAC), was created in 1989. The SMP was built in collaboration with ODF, OHA, and DEQ. ODF implements the plan with support from partner agencies. The goal of the plan is to find a balance between conducting necessary prescribed burns while protecting air quality and public health. Part of this balance has historically included DEQ working with communities to develop Community Response Plans (CRP) for prescribed fire smoke as outlined in [OAR 629-048-0180](#). These plans are

recommended for communities with a history of smoke incidents, a high population density, or special protection status related to visibility, resulting in the community being designated as a Smoke Sensitive Receptor Area (SSRA). When developing a CRP, local public health creates a plan to notify the public of potential smoke impacts from prescribed fire and creates connections with the community and with the entities that conduct prescribed fire. Development and implementation of a CRP also allows a community designated as an SSRA to request an exemption to the one-hour intrusion threshold. The request initiates review of the CRP by ODF, DEQ, and OHA to ensure it meets the regulatory requirements in [OAR 629-048-0180](#). If all requirements are met, the exemption request is approved, and the one-hour intrusion threshold does not apply to the community.

The 20-Year Landscape Resiliency Strategy responds to the Oregon Legislature's bipartisan directive in Senate Bill 762, signed into law on July 19, 2021, which directs the Oregon Department of Forestry (ODF) to develop a strategic plan that prioritizes restoration actions and geographies for wildfire risk reduction. Ultimately, seven federal and state agencies and the Governor's Office actively engaged in developing the strategy, making the 20-Year Landscape Resiliency Strategy a shared commitment among the following partner agencies: ODF, Oregon Watershed Enhancement Board, Oregon Department of Fish and Wildlife, US Forest Services, Natural Resources Conservation Service, Bureau of Land Management, and the Oregon Governor's Office. In June 2023, [Oregon's 20-Year Landscape Resilience Strategy progress report](#) was published.

The goals of the strategy include shifting the incidence, frequency, and severity of wildfires toward a desired condition by maintaining and restoring landscapes in Oregon that are resilient to extreme fire, drought, insects, and diseases, and increasing public awareness of the inevitability of wildfire, the importance of understanding how to live safely with wildfire, and current progress towards landscape resilience and wildfire risk reduction. Priority actions to achieve these goals include increasing the pace and scale of strategic thinning projects, expanding the use of prescribed fire, and providing wood utilization opportunities to reduce and maintain appropriate fuel loads effectively. Near-term priorities include a dashboard to track interagency accomplishments, identify statewide outcome-based metrics, and create five-year workplans. The work plans include a localized prioritization process identifying high-priority areas, and the specific actions required to reduce wildfire risk effectively.

In November 2023, as a result of growing wildfire risk in the Pacific Northwest and recommendations included in the [2023 GAO report, Wildfire Smoke: Opportunities to Strengthen Federal Efforts to Manage Growing Risk](#), USDA, USFS, DOI, EPA, and CDC convened and developed an MOU to implement a more coordinated approach to supporting land management and public health goals and objectives. In the subsequent Joint Statement, the agencies acknowledged the health risks of smoke, regardless of the source, and the need to protect public health while increasing the pace and scale of

prescribed fire in the Pacific Northwest. As a follow-up to meetings and the MOU signing in November 2023, the Joint Statement outlined the goals of acting with urgency to increase the use of fire while protecting public health, safety, and property through increased communication and preparedness efforts before, during, and after prescribed burns; identifying and overcoming limiting factors to implementation of prescribed fire at scale; applying best practices and being innovative and comprehensive in the approach to minimizing smoke impacts; and trying new approaches, learning, and adapting strategies around prescribed fire and smoke mitigation.

As part of the tabletop and Joint Statement, a prescribed burn pilot program was undertaken in Bend, Oregon, in the spring of 2024. The goal of the pilot was to increase the pace and scale of prescribed burning in the complex area directly to the west of Bend. Increased public outreach was conducted during the pilot to inform the community of the burns and to give them tools to protect themselves from potential smoke impacts. Air quality sensors were placed in volunteers' homes to determine how smoke impacts indoor air quality and additional monitors were placed around the community to detect the impacts of outdoor air quality. Additional forecasting, modeling and data collection also occurred to determine how smoke moves in the area during and after the burns and to identify potential shortcomings in existing models. Data from the pilot is still being reviewed, but over 1,800 acres were burned when the annual average is 200 to 300 acres.

As wildfire mitigation efforts and fuels reduction projects continue in Oregon, biomass disposal will need to meet the pace of removal. Disposal of woody material without the use of prescribed fire will provide opportunities for economic growth while limiting emissions, protecting public health, and creating space in our airsheds to conduct prescribed burns when and where they are most important. Biomass utilization projects are present in Oregon in the form of bioenergy projects for communities, schools, and hospitals, and production of biochar, among others. One means of biomass reduction and utilization that is growing in popularity are air curtain incinerators (ACIs). An ACI can be either a stationary or portable incinerator. Clean wood waste is loaded into the firebox and a fire starter ignites the wood waste. A blower is used to forcefully project a curtain of air across the open chamber at the top of the firebox. This air curtain is projected across the firebox at an angle that generates a cyclonic flow within the firebox. This accelerates the combustion process and promotes uniform combustion throughout the firebox. Emissions are reduced because the smoke particles are trapped below the air curtain and re-burned. As this recirculated combustion process continues, the non-combustible part of wood waste is reduced to a clean ash or biochar that accumulates in the bottom of the firebox. This biochar is a beneficial soil amendment that retains water and nutrients, improves drainage and aeration, and acts as a vehicle for carbon sequestration in the soil.

The EPA changed ACI permit requirements in 2024, removing the requirement for a Title V permit to operate ACIs. This change means companies can obtain an ACI permit more easily and cost-effectively. DEQ will update the rules and permit requirements for ACIs

to align with the EPA change in 2025.

Key issues Wildfire and prescribed fire smoke, along with wildfire risk, continue to be a topic of interest across the West. DEQ will continue working with our partners to identify effective and innovative means of addressing both wildfire risk and smoke impacts. The SMAC will continue to be a main forum for discussing issues related to prescribed fire smoke. Community listening sessions will be held across the state and the Smoke Management Rule revisions will move forward.

EQC involvement At this time, no action is required by EQC. As rulemakings and permit updates for air curtain incinerators move forward, proposed rule revisions will be brought before the Commission for consideration. The EQC and Board of Forestry will receive informational updates prior to rulemaking for the Smoke Management Rules.

The Smoke Management Rules are incorporated into the State Implementation Plan, a compilation of documents and regulations that the state relies on to demonstrate compliance with the Clean Air Act. This means that while the Board of Forestry is the governing body for any Smoke Management Rule amendments, the EQC must concur with those updates in order to incorporate those rules, by vote, into the State Implementation Plan. DEQ, ODF and OHA maintain a practice of working closely together, with the agencies' respective policy-making bodies, during the program updates.

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