

State of Oregon
Department of Environmental Quality

Memorandum

Date: Nov. 20, 2013

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda item H, Informational item: Update on review of the Oregon Smoke Management Plan
Dec. 11-12, 2013, EQC meeting

Why this is important

Each year in Oregon approximately 150,000 acres of forested land are burned by landowners through the practice of prescribed burning. The Oregon Department of Forestry manages this under the Oregon Smoke Management Plan. Changes to the plan require both Oregon Board of Forestry approval and EQC approval as a revision to the Oregon State Implementation Plan.

Recently, ODF and DEQ completed a one-year review of the plan, and are proposing several changes. The agencies intend to conduct joint rulemaking this winter. DEQ is seeking feedback from the commission on the proposed changes prior to moving ahead with rulemaking.

Background and other information

Prescribed forest burning is a long-standing practice in Oregon to eliminate unwanted forest debris. The smoke from this burning can pose a serious public health risk due to fine particulate matter, or PM2.5, in the smoke. Even brief exposures to smoke can cause health problems for persons with asthma, emphysema, congestive heart disease and other existing medical conditions. The elderly, pregnant women and young children are especially high-risk groups. Smoke from forest burning also affects visibility in national parks and wilderness areas, as well as general outdoor recreation activities.

The plan was adopted as a regulatory program in 1972. State statute directs ODF to operate a smoke management program for prescribed burning on private, federal and state forestlands. The objective of the plan is to maximize burning opportunities, reduce the risk of wildfires, and minimize smoke impacts on the public. Despite efforts to conduct burning under optimum smoke dispersal conditions, some impacts do occur.

Since its adoption the plan has resulted in a very effective smoke management program. The program has been able to avoid prescribed burn events exceeding air quality standards by avoiding major,

prolonged smoke impacts in communities that exceed the daily PM_{2.5} standard. A more significant challenge has been to avoid the more typical short-term smoke intrusion that can trigger health problems for sensitive individuals and high-risk groups. Each year there are about five to 10 documented short-term smoke intrusions in the state, which is an extremely small number relative to the total acres burned, but DEQ can only measure where there is monitoring capability. Many smaller communities and rural areas do not have monitoring equipment.

One of the requirements in the plan is to conduct a periodic review of the effectiveness of the smoke management program. ORS 477.552 calls for the need to “improve the management of prescribed burning as a forest management and protection practice,” and to “minimize emissions from prescribed burning consistent with the air quality objectives of the federal Clean Air Act and the State of Oregon State Implementation Plan.”

ODF and DEQ reviewed the plan in 2007. Improvements made included increasing the number of areas in the state that receive special smoke protection. Most of the larger cities and heavily populated areas in the state are designated as Smoke Sensitive Receptor Areas where greater restrictions are placed on prescribed burning to prevent smoke impacts. There are currently 23 of these areas in the state, which include several current and former PM₁₀/PM_{2.5} nonattainment areas, and the entire Willamette Valley and Columbia River Gorge National Scenic Area. Smoke Sensitive Receptor Areas protection is year-round, as compared to the Special Protection Zone requirements described below, which are additional wintertime restrictions on prescribed burning within 20 miles of the community.

ORS 477.013 requires the State Forester and DEQ to approve any changes to the plan. The commission has the authority to incorporate the plan into the Oregon State Implementation Plan. Otherwise, all rules and guidance associated with the plan are adopted by ODF through the Board of Forestry.

Earlier this year, ODF and DEQ completed a periodic review of the plan. Since both agencies believe the smoke management program has been very effective, they did not recommend major program improvements. Brian Finneran served as DEQ’s representative during this review, and will summarize the proposed changes.

**Summary of
proposed
changes**

1. Adopting additional voluntary provisions to provide greater visibility protection for Oregon Class I areas, which are national parks and wilderness areas designed by Congress, by applying more

intensive smoke management when burning upwind of Crater Lake National Park and the Kalmiopsis Wilderness. These areas generally receive more frequent smoke impacts from prescribed burning than other Class I areas. DEQ proposed this to help meet the federal Regional Haze Rule that DEQ is implementing through the 2010 Oregon Regional Haze Plan.

2. Adopting additional voluntary provisions to encourage the use of alternatives to burning and emission reduction techniques. ODF agreed to convene a joint agency workgroup to identify ways to encourage alternative use and emission reduction techniques, to conduct landowner surveys and collect data on use alternatives under the current program, and to document this in ODF's annual smoke management report.
3. Removing some wintertime burning restrictions near two former PM10 nonattainment areas. Currently there are five communities for which Special Protection Zone requirements apply during the winter. These are Klamath Falls, Lakeview, Oakridge, Medford and La Grande, which have a history of exceeding the federal health standard for particulate matter and rely heavily on wintertime residential woodstove curtailment programs to improve air quality. The Special Protection Zone requirements restrict prescribed burning within 20 miles of these areas on poor air quality days. Being in the winter, this affects a relatively small amount of prescribed burning. The proposed changes eliminate the La Grande zone and reduce size of the Medford zone. DEQ supports these changes, as significant air quality improvements allow these Special Protection Zone changes without any significant risk to air quality. Moreover, these communities are already protected year-round as Smoke Sensitive Receptor Areas.
4. Changing ODF rules to allow ODF to regulate prescribed burning outside forest district boundaries, which currently fall under DEQ Open Burning program rules. This would allow ODF and DEQ to enter into a memorandum of understanding to manage this burning under the Oregon Smoke Management Plan. There is an extremely small amount of prescribed burning that falls into this category.
5. Require smoke monitoring for prescribed burns over 2000 tons in size, following existing language in ODF guidance for monitoring smoke movement.
6. Minor housekeeping changes to ODF rules that involve burn fees, burn plan deadlines, Special Protection Zone language clean-up, and the option to move the five-year plan review to an earlier or

later time, but not to exceed 10 years, if mutually agreed to by ODF and DEQ.

**Advisory
committee and
public outreach**

As part of the Oregon Smoke Management Plan review, ODF formed an advisory committee, referred to as the review committee, which met every two months over a year. The review committee was appointed by ODF in consultation with DEQ, and consisted of forest land managers and landowners, and representatives from the general public, environmental organizations and tribes. The review committee developed formal recommendations for ODF and the Board of Forestry. DEQ supports these recommendations.

Public outreach to date has consisted of ODF and DEQ discussing the proposed Special Protection Zone changes with local officials in Medford and La Grande, to provide assurances that this will not have an adverse effect on air quality in these communities during the winter, or a negative impact on local woodstove curtailment programs.

**Next steps and
commission
involvement**

No action is requested. This item is an opportunity for the commission to hear results of the Oregon Smoke Management Plan review, ask questions about the smoke management program and provide DEQ with any feedback on the changes being proposed.

On Nov. 14, 2013, ODF presented a summary of the plan review and proposed changes to the Board of Forestry, and was granted authorization to proceed with formal rulemaking. ODF and DEQ are planning simultaneous rulemaking, including joint public hearings in January 2014. ODF will be seeking Board of Forestry approval in April 2014, while DEQ will seek EQC approval of the Oregon Smoke Management Plan changes as a SIP revision in June 2014.

Attachments

A. ODF proposed rule changes to OAR 629-048 (redline/strikeout).

**Available upon
request**

1. ODF Review Committee final recommendations.

Approved:

Division: _____

Section: _____

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