

SHASTA COUNTY AIR QUALITY MANAGEMENT DISTRICT

RULE 2:8 -- AGRICULTURAL BURNING

(Amended 7-28-87, 12-5-95, 7-17-01)

a. Definitions

For the purposes of this section, the following definitions shall apply:

Acreage in a prescribed burn project means the land area where there is a planned application of fire according to the definition of prescribed burning provided under the definition of Agricultural Burning in Rule 2:8a.

Agricultural burning means open outdoor fires used in agricultural operations in the growing of crops or raising of fowl or animals, or open outdoor fires used in forest management, range improvement, or the improvement of land for wildlife and game habitat, or disease or pest prevention. Agricultural burning also means open outdoor fires used in the operation or maintenance of a system for the delivery of water for the purposes specified above. Agricultural burning also means open outdoor fires used in wildland vegetation management burning. Wildland vegetation management burning is the use of prescribed burning conducted by a public agency, or through a cooperative agreement or contract involving a public agency, to burn land predominantly covered with chaparral, trees, grass, or standing brush. Prescribed burning is the planned application of fire to vegetation to achieve any specific objective on lands selected in advance of that application. The planned application of fire may also include natural or accidental ignition.

Burn plan means an operational plan for managing a specific fire to achieve resource benefits and specific management objectives. The plan includes, at a minimum, the project objectives, contingency responses for when the fire is out of prescription with the smoke management plan, the fire prescription (including smoke management components), and a description of the personnel, organization, and equipment.

Burn project means an active or planned prescribed burn or a naturally ignited wildland fire managed for resource benefits.

Designated agency means any agency designated by the Air Resources Board as having authority to issue agricultural burning, including prescribed burning, permits. An air district may request such a designation for an agency. The U.S. Department of Agriculture (USDA) Forest Service

and the California Department of Forestry and Fire Protection (CDF) are so designated within their respective areas of jurisdiction.

Fire protection agency means any agency with the responsibility and

authority to protect people, property, and the environment from fire, and having jurisdiction within a district or region.

Forty-eight hour forecast means a prediction of the meteorological and air quality conditions that are expected to exist for a specific prescribed burn in a specific area 48 hours from the day of the prediction. The prediction shall indicate a degree of confidence.

Land manager means any federal, state, local, or private entity that administers, directs, oversees, or controls the use of public or private land, including the application of fire to the land.

Marginal burn day means a day when limited amounts of agricultural burning, including prescribed burning, for individual projects in specific areas for limited times is not prohibited by the state board and burning is authorized by the District consistent with these Guidelines.

Ninety-six hour trend means a prediction of the meteorological and air quality conditions that are expected to exist for a specific prescribed burn in a specific area 96 hours from the day of the prediction.

No-burn day means any day on which agricultural burning, including prescribed burning, is prohibited by the state board or the air district in which the burning will occur.

Open burning in agricultural operations in the growing of crops or raising of fowl or animals means:

1. The burning in the open of materials produced wholly from operations in the growing and harvesting of crops or raising of fowl or animals for the primary purpose of making a profit, of providing a livelihood, or of conducting agricultural research or instruction by an educational institution.
2. In connection with operations qualifying under subdivision 1.:
 - a) The burning of grass and weeds in or adjacent to fields in cultivation or being prepared for cultivation.
 - b) The burning of materials not produced wholly from such operations, but which are intimately related to the growing or harvesting of crops and which are used in the field, except as prohibited by district regulations. Examples are trays for drying raisins, date palm protection paper, and fertilizer and pesticide sacks or containers, where the sacks or containers are emptied in the field.

Permissive-burn day, or burn day means any day on which agricultural burning, including prescribed burning, is not prohibited by the state board

and burning is authorized by the District consistent with its open burning rules.

Pre-fire fuel treatment means techniques which can reasonably be employed prior to prescribed burning in order to reduce the emissions that would otherwise be produced in a prescribed fire.

Prescribed fire means any fire ignited by management actions to meet specific objectives, and includes naturally-ignited wildland fires managed for resource benefits.

Range improvement burning means the use of open fires to remove vegetation for a wildlife, game, or livestock habitat or for the initial establishment of an agricultural practice on previously uncultivated land.

Seventy-two hour outlook means a prediction of the meteorological and air quality conditions that are expected to exist for a specific prescribed burn in a specific area 72 hours from the day of the prediction.

Smoke Management Plan means a document prepared for each fire by land managers or fire managers that provides the information and procedures required by the District to minimize smoke impacts of the proposed burn project.

Smoke management prescription means measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include, but are not limited to, minimizing smoke impacts, and safety, economic, public health, environmental, geographic, administrative, social, or legal considerations such as complying with Health and Safety Code section 41700, public nuisance statute.

Smoke sensitive areas are populated areas and other areas where the district determines that smoke and air pollutants can adversely affect public health or welfare. Such areas can include, but are not limited to, towns and villages, campgrounds, trails, populated recreational areas, hospitals, nursing homes, schools, roads, airports, public events, shopping centers, and mandatory Class I areas.

Wildfire means an unwanted wildland fire.

Wildland means an area where development is generally limited to roads, railroads, power lines, and widely scattered structures. Such land is not cultivated (i.e., the soil is disturbed less frequently than once in 10 years), is not fallow, and is not in the United States Department of Agriculture (USDA) Conservation Reserve Program. The land may be neglected altogether or managed for such purposes as wood or forage production, wildlife, recreation, wetlands, or protective plant cover.

For CDF only, Wildland as specified in California Public Resources Code (PRC) section 4464(a) means any land that is classified as a state responsibility area pursuant to Article 3 (commencing with Section 4125) of Chapter 1, Part 2 of Division 4 and includes any such land having a plant cover consisting principally of grasses, forbs, or shrubs that are valuable for forage. Wildland also means any lands that are contiguous to lands classified as a state responsibility area if wildland fuel accumulation is such that a wildland fire occurring on these lands would pose a threat to the adjacent state responsibility area.

b. General Requirements Applying to All Agricultural Burning

1. No person knowingly shall engage in agricultural burning unless he or she has a valid permit from an agency designated by the California Air Resources Board to issue such permits in the area where the burn will take place.
2. No permit shall be valid and agricultural burning is prohibited on No-Burn days except:
 - a) By special permit, issued by the Air Pollution Control Officer (APCO), agricultural burning may be authorized on days designated as No-Burn days if the denial of such permit would threaten imminent and substantial economic loss. Special permits issued under this section shall comply with the following provisions:
 - 1) The total acreage on any given day burned under special permits shall not exceed 10 percent of the acreage allowed to be burned on Permissive Burn days for that period of the year.
 - 2) No special permits, except those for range improvement or forest management burning, will be issued to any person until the third day after a Permissive-Burn day or to any person who has not used (except for due cause) a prior Permissive-Burn day.
 - 3) No special permits will be issued to any person unless burning under a special permit will comply with all applicable burning rules.
 - 4) No special permits will be issued for any day on which the District predicts (using available real time

monitoring data and other data resources) that the Federal ambient ozone standard will be exceeded. Evaluation of possible exceedance can be done by evaluating ozone trends for the day and/or by considering levels of ambient ozone prior to the given day and or prevailing weather conditions.

- 5) No special permits shall be issued when burning under such permit would adversely affect air quality over smoke-sensitive or populated areas.
 - b) Upon request from a permittee through a designated agency and to the District, seven days in advance of a specific range improvement or forest management burn at any elevation, a forecast will be issued by the CARB forty-eight (48) hours prior to the date scheduled for the burn. Without further request, a daily forecast will continue to be issued as long as requested.
 - c) A Permissive-Burn or No-Burn outlook will be available up to seventy-two (72) hours in advance of such burns.
 - d) A Permissive-Burn or No-Burn trend will be available up to ninety-six (96) hours in advance of such burns.
- c. General Requirements For All Prescribed Burning And Prescribed Fires, Including Forest Management, Range Improvement, and Wildland Vegetation Management Burning
1. All burn projects planned for the months of April through August for a calendar year shall be registered with the District annually prior to April 1. Likewise, all burn projects planned for the months of September through March of the next calendar year shall be registered with the District annually prior to September 1. Updates to the scheduled burn dates shall be provided with a minimum of 7 days notice thereafter as new information becomes available. Actual acreage burned shall be reported annually as required by the District.
 1. Smoke Management Plans (SMPs) shall be submitted to the District for review and approval by any person or entity proposing to burn more than 10 acres in size or proposing to burn a project that would produce more than 1 ton of particulate matter. SMPs must contain, at a minimum, the following information:
 - a) Location, types, and amounts of material to be burned;

- b) Expected duration of the fire from ignition to extinction;
- b) Identification of responsible personnel, including telephone contacts; and
- d) Identification and location of all smoke sensitive areas

3. Smoke Management Plans (SMPs) shall be submitted to the District for review and approval by any person or entity proposing to burn more than 100 acres in size or proposing to burn a project that would produce more than 10 tons of particulate matter. SMPs must contain, at a minimum, the information required in Section 2 above as well as the following information:

- d) Identification of meteorological conditions necessary for burning;
- b) The smoke management criteria the land manager or his/her designee will use for making burn ignition decisions;
- b) Projections, including a map, of where the smoke from burns is expected to travel, both day and night;
- b) Specific contingency actions (such as fire suppression or containment) that will be taken if smoke impacts occur or meteorological conditions deviate from those specified in the smoke management plan;
- b) An evaluation of alternatives to burning considered (if an analysis of alternatives has been prepared as part of the environmental documentation required for the burn project pursuant to the National Environmental Policy Act (NEPA) or the California Environmental Quality Act (CEQA), as applicable, the analysis may be attached to the smoke management plan in satisfaction of this requirement); and
- b) Discussion of public notification and education procedures, including appropriate signage at burn sites, and procedures for public reporting of smoke complaints.

4. If smoke may impact smoke sensitive areas, appropriate monitoring, which may include visual monitoring, ambient particulate matter monitoring or other monitoring approved by the

District, as required by the District, shall be provided by any person or entity planning the following burn projects:

- d) Projects greater than 250 acres;
- b) Projects that will continue burning or producing smoke overnight;
- b) Projects conducted near smoke sensitive areas; or
- b) As otherwise required by the District.

2. Daily coordination between the land manager or his/her designee and the District shall be required for multi-day burns which may impact smoke sensitive areas, to affirm that the burn project remains within the conditions specified in the smoke management plan, or whether contingency actions are necessary. The District shall also consult with the California Air Resources Board (CARB) on multi-day burns having the potential to impact smoke sensitive areas in order to receive guidance regarding CARB procedures for review and approval.

2. For natural ignitions on a no-burn day, the initial “go/no-go” decision to manage the fire for resource benefit will be a “no-go” unless:

a) after consultation with the District, the District decides for smoke management purposes, that the burn can be managed for resource benefit, or

a) for periods of less than 24 hours, a reasonable effort has been made to contact the District, or if the District is not available, the ARB, or

a) after 24 hours, the District has been contacted, or if the District is not available, the ARB has been contacted and concurs that the burn can be managed for resource benefit.

The no-go decision does not necessarily mean that the fire must be extinguished, but that the fire cannot be considered as a prescribed fire.

7. Smoke management plans shall be submitted by the appropriate land manager to the District within 72 hours of the start of a naturally-ignited wildland fire managed for resource benefits that is

expected to exceed 10 acres in size.

8. All conditions and requirements stated in the smoke management plan of any prescribed burn project must be verified by the land manager or his/her designee to be met on the day of the burn event and prior to ignition.
9. A post-burn smoke management evaluation shall be submitted to the District within 30 days after the burn takes place by any person or entity conducting a prescribed burn project larger than 250 acres or managing a naturally-ignited wildland fire exceeding 250 acres.
10. Vegetation to be burned under a prescribed burn plan shall be in a condition that will minimize the smoke emitted during combustion when feasible, considering safety and other factors. The material to be burned shall be piled whenever possible, unless good silviculture practices or ecological goals dictate otherwise.
11. No prescribed burning of any land area comprising more than 10 acres shall be conducted pursuant to such permit without specific District approval on the day of the burn. Burning conducted pursuant to each permit must comply with all conditions specified on the permit and conform to the prescription for the burn as outlined in the smoke management plan submitted to the District for approval.

d. Agricultural Burning Restrictions

1. The following specific restrictions shall apply to agricultural operations in the growing and harvesting of crops or raising of fowls or animals.
 - a) The Air Pollution Control Officer (APCO) may restrict burning to selected permittees on Permissive-Burn days if the total tonnage to be ignited would discharge a volume of contaminants into the atmosphere sufficient to cause adverse conditions.
 - b) Rice, barley, wheat, and oat straw shall be ignited only by strip-firing into the wind or by backfiring, except where extreme fire hazard is declared to exist by fire control officials or where crops are determined by the APCO not to lend themselves to these techniques.
 - c) No field crop burning shall commence before 10:00 a.m. nor continue after 5:00 p.m. of any day. Ignition hours for all other agricultural wastes shall be between the hours of 10:00 a.m. and 3:00 p.m., unless otherwise specified by the APCO.

Fires must be completely out by 5:00 p.m.

For areas above 1,000 feet elevation, the ignition hours shall be set by the fire agency with jurisdiction over the burn site, but in no case shall ignition be allowed before 10:00 a.m. or after 12:00 midnight.(Amended 12-5-95)

- d) On Permissive-Burn days during the critical period from October 1 through November 15 of each year, open burning of material directly related to agricultural operations in the growing and harvesting of crops or raising of fowls or animals shall be limited each day to that amount that is estimated to be Shasta County's acreage allotment pursuant to the Basin allocation formula as delineated by the Sacramento Valley Air Basin Control Council.

Notwithstanding the above, the aforementioned acreage allotments shall not include burning conducted above 2,000 ft. mean elevation for the purposes of forest management and/or range improvement as defined within these regulations.

- e) No field or row crop harvested prior to September 10 shall be allowed to be burned during the period from October 1 through November 15 of each year unless for good cause and with written authority of the District. In granting such written authority the district shall:

- 1) Ensure the amount to be burned is included in Shasta County's allotment as specified in (d) above;
- 2) Require a specific explanation of the agricultural practices that require immediate burning;
- 3) Require the person to specify the reason why the burning was not conducted prior to October 1;
- 4) Require the special permit to be valid only on Permissive-Burn days.

- f) All rice harvesting shall employ a mechanical straw spreader to ensure even distribution of the straw, except that rice straw may be left in rows, provided it meets drying time criterion prior to a burn as described below. Rice straw may also be left standing provided it is dried and meets the crackle test criteria described below prior to burning.

- f) After harvest no spread rice straw shall be burned prior to a three-day drying period, and no rowed rice straw shall be burned prior to a ten-day drying period, unless the rice straw makes an audible crackle when tested just prior to burning with the following testing method: When checking the field for moisture, a composite sample of straw from under the mat, in the center of the mat, and from different areas of the field shall be taken to ensure a representative sample. A handful of straw from each area will give a good indication. Rice straw is dry enough to burn if a handful of straw selected as described above crackles when it is bent sharply.
- h) After a rain exceeding 0.15 inch (fifteen hundredths of an inch), rice straw shall not be burned unless the straw makes an audible crackle when tested just prior to burning with the testing method described above.

e. Range Improvement Burning Restrictions

1. The APCO may restrict burning to selected permittees on designated burn days if the total tonnage to be ignited would discharge a volume of contaminants into the atmosphere sufficient to cause adverse conditions. Amended 7-28-87, 7-17-01)
2. Brush shall be killed at least six (6) months prior to the burn if economically and technically feasible.
3. If the burn is to be done primarily for improvement of land for wildlife and game habitat, the permit applicant must file with the District a statement from the Department of Fish and Game certifying that the burn is desirable and proper.

f. Forest Management Burning Restrictions

The APCO may restrict burning to selected permittees on Permissive-Burn days if the total tonnage to be ignited would discharge a volume of contaminants into the atmosphere sufficient to cause adverse conditions. (Amended 7-28-87, 7-17-01)