

KERN COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 417 - AGRICULTURAL AND PRESCRIBED BURNING

(Adopted 4/18/72, Amended 12/12/79, 6/30/80, 8/22/89, 7/11/96, 3/13/03, 7/24/03)

I. Applicability

This Rule applies to all agricultural and prescribed burning conducted within the District.

Provisions of this Rule implement Smoke Management Guidelines for Agricultural and Prescribed Burning, promulgated under Title 17, California Code of Regulations and as adopted September 13, 2001.

II. Definitions

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

- A. Agricultural and Prescribed Burning means open outdoor fires used in agricultural operations in the growing of crops or the raising of fowl or animals; or open outdoor fires used in forest management, range improvement, or improvement of land for wildlife and game habitat, wildland vegetation management, or disease or pest prevention; or open outdoor fires used in the operation or maintenance of a system for the delivery of water for purposes specified in Subsection I.A.1.
- B. Air Quality means characteristics of ambient air based on California Ambient Air Quality Standards which have been adopted by the California Air Resources Board pursuant to Section 39606 of the California Health and Safety Code and National Ambient Air Quality Standards which have been established pursuant to Sections 108 and 109 of the Federal Clean Air Act pertaining to criteria pollutants and Section 169A of the Federal Clean Air Act pertaining to visibility.
- C. Ambient Air means that portion of the atmosphere, external to buildings, to which the general public has access.
- D. Approved Ignition Devices means those instruments or materials able to ignite agricultural waste without production of black smoke by the ignition device, including liquid petroleum gas, butane, propane or diesel oil burners and flares, but not including tires, tar paper, oil or other similar materials.
- E. Brush Treated means dead, felled, crushed or uprooted with mechanical equipment, or desiccated with herbicides.
- F. Burn Plan means written operational plan for managing a specific fire to achieve resource benefits and specific management objectives. Such plan includes, at a minimum, project objectives, contingency responses for when the fire is out of prescription with the smoke management plan, fire prescription (including smoke

management component), and description of pre-fire fuel treatment, personnel, organization and equipment.

- G. Burn Project means active or planned prescribed burn or naturally ignited wildland fire managed for resource benefit.
- H. Designated Agency means any agency designated by CARB as having authority to issue agricultural or prescribed burning permits. The Districts may request such designation for an agency. The U.S. Department of Agriculture Forest Service and the California Department of Forestry and Fire Protection are so designated within their respective areas of jurisdiction.
- I. Fire Protection Agency means any agency with responsibility and authority to protect people, property and the environment from fire and having jurisdiction within a district or region.
- J. Forest Management means use of open fires as part of forest management practice to remove forest debris. Forest management practices include timber operations, silvicultural practices or forest protection practices.
- K. Forty-eight Hour Forecast means prediction of meteorological and air quality conditions expected to exist for a specific prescribed burn in a specific area 48 hours from the date of the prediction. Such prediction shall indicate degree of confidence.
- L. Land Manager means any federal, state, local or private entity, or his designee, who administers, directs, oversees or controls use of public or private land, including application of fire to land.
- M. Marginal Burn Day means day when limited amounts of prescribed burning, for individual projects in specific areas for limited times, is not prohibited by CARB and burning is authorized by the District consistent with this Rule.
- N. Ninety-six Hour Trend means prediction of meteorological and air quality conditions expected to exist for a specific prescribed burn in a specific area 96 hours from the date of prediction.
- O. No-Burn Day means any day on which agricultural burning and prescribed burning is prohibited by CARB or the District.
- P. Open Burning for Agricultural Operations in the Growing of Crops or Raising of Fowl or Animals means burning in the open of materials produced wholly from operations in the growing of crops and harvesting of crops or raising of fowl or animals for the primary purpose of making a profit, providing a livelihood or conducting agricultural research or instruction by an educational institution. This includes, for the purpose of cultural practice burns, burning of fence rows and ditch banks for weed control and weed abatement and burning in nontillage orchard operations and burning of material not produced wholly from such operations, but intimately related to the growing or harvesting of crops and used in the field, except as prohibited by District regulations.

Examples are pesticide and fertilizer sacks emptied in the field.

- Q. Permissive-Burn Day or Burn Day means any day on which agricultural burning, including prescribed burning, is not prohibited by CARB and burning is authorized by the District consistent with this Rule.
- R. Pre-fire Fuel Treatment means any of several vegetation removal techniques that can reasonably be employed prior to prescribed burning to reduce amount of vegetation that would otherwise be consumed in a prescribed fire.
- S. Prescribed Burning - means planned application of fire to vegetation to achieve any specific objective on lands selected in advance of that application. Planned application of fire may also include natural or accidental ignition.
- T. Prescribed Fire means any fire ignited by management actions to meet specific objectives and may include naturally ignited wildland fires managed for resource benefits.
- U. Range Improvement Burning means use of open fires to remove vegetation for a wildlife, game or livestock habitat, or for initial establishment of an agricultural practice on previously uncultivated land.
- V. Seventy-two Hour Outlook means prediction of meteorological and air quality conditions expected to exist for a specific prescribed burn in a specific area 72 hours from the date of the prediction.
- W. Silviculture means establishment, development, care and reproduction of stands of timber.
- X. Smoke Management Plan means document prepared for each fire by a land manager or fire manager that provides information and procedures required in Section VII.
- Y. 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 insuring safety and consideration of economic, public health, environmental, geographic, administrative, social or legal issues such as complying with Health and Safety Code Section 41700 (public nuisance prohibition).
- Z. Smoke Management Program means program defined in the Smoke Management Guidelines for Agricultural and Prescribed Burning, promulgated under Title 17, California Administrative Code.
- AA. Smoke Sensitive Areas means populated areas and other areas where the District determines 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 and other populated recreational areas, hospitals, nursing homes, schools, roads, airports,

public events, shopping centers and mandatory Class I areas.

- BB. Wildfire means unwanted wildland fire.
- CC. Wildland means area where development is generally limited to roads, railroads, power lines and widely scattered structures. Such land is not cultivated, i.e., soil is disturbed less frequently than once in 10 years, is not fallow and is not in the United States Department of Agriculture Conservation Reserve Program. Such land may be neglected altogether or managed for such purposes as wood or forage production, wildlife, recreation, wetlands or protective plant cover.
- DD. Wildland Fire means any nonstructural fire, other than prescribed fire, that occurs in wildland.
- EE. Wildland/Urban Interface means line, area or zone where structures and other human development meet or intermingle with wildland.
- FF. Wildland Vegetation Management means 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 (as defined in Title 14, California Code of Regulations (CCR), Section 1561.1), trees, grass or standing brush.

III. General Requirements - Agricultural and Prescribed Burning

A. Burn Permits

1. No person shall knowingly set, conduct or allow agricultural or prescribed burning unless he or she has a valid burn permit from the District or designated agency.
2. A valid burn permit shall be required from the fire protection agency that has jurisdiction in the area of the proposed burn project.
3. Burning conducted pursuant to permits issued by the Control Officer or a designated agency shall comply with all conditions specified on such permits. Failure to abide by permit conditions shall be a violation of Section 48152 of the California Health and Safety Code and District Regulation IV.
4. All permits issued by the Control Officer or designated agencies for agricultural and prescribed burning shall contain the following words or words of similar import: "This permit is valid only on those days during which agricultural burning, including prescribed burning, is not prohibited by the California Air Resources Board or by the District pursuant to Section 41855 of the California Health and Safety Code and when burning on lands identified has been approved by the District."
5. Permits issued by designated agencies and fire protection agencies shall be subject to the Rules and Regulations of the District.

6. The Control Officer may issue special permits for agricultural and prescribed burning on days designated as no-burn days if denial of such permit would threaten imminent and substantial economic loss. In authorizing such burning, the District may limit amount of material that can be burned in any one day such that burning is not likely to cause or contribute to exceedances of air quality standards or result in adverse smoke impacts to smoke sensitive areas.
7. Each applicant for a permit shall provide information required by the designated agency for fire protection purposes.
8. Each application for a permit shall provide information requested by the District.

B. Registration and Reporting

1. All persons desiring to conduct prescribed burning in the District shall register their planned burn projects with the District as far in advance as possible. Project updates to this registration process shall be submitted as appropriate and in advance of the burn. Burn registration shall include: name of the permittee, including a contact person with phone number, listing of planned projects, project location and total acreage to be burned for each project.
2. Designated agencies shall submit a written report to the District describing agricultural and prescribed burning conducted pursuant to this Rule by February 1st of each year. Such report shall include estimated tonnage or acreage burned in agricultural burning operations and estimated tonnage burned in prescribed burning operations during the prior calendar year.

C. Permissive Burn, Marginal Burn and No-Burn Days

1. Agricultural burning shall be permitted only on days designated as permissive burn days by CARB. Such designations shall be announced by 3:00 pm every day whether the following day is a permissive burn day, a marginal burn day or a no-burn day, or whether the decision will be announced the following day. If conditions preclude a forecast until the next day, the decision will be announced by CARB by 7:45 am. Such notices are based on Meteorological Criteria for Regulation Agricultural Burning and Prescribed Burning, set forth in CARB's Smoke Management Guidelines for Agricultural and Prescribed Burning.
2. Burning of empty sacks (not containers) which have contained pesticides or other agricultural substances shall be permitted on no-burn days provided such sacks are within the definition of Open Burning in Agricultural Operations.
3. A marginal burn day may be declared if meteorological conditions approach criteria for permissive burn days in CARB's Smoke Management Guidelines for Agricultural and Prescribed Burning, and adverse smoke impacts are not expected. On marginal burn days the Control Officer may authorize limited amounts of prescribed burning for individual projects when smoke impacts to smoke sensitive areas are not expected as a result of that burning. Agricultural and residential

burning shall be prohibited on any day which is a marginal burn day.

D. Advance Forecasts

1. Forty-eight hour forecast - Permittee shall initiate a forty-eight hour burn forecast request seven days in advance of the proposed burn using CARB controlled burned forecast request form (CB-3) or other District/CARB approval request mechanism such as a prescribed fire incident reporting system. Such request shall be submitted to the District, and if the District needs assistance, passed on to CARB. CARB shall then continue to issue forty-eight hour burn forecasts until the District issues a burn authorization notice for the project or until the District requests CARB's forty-eight hour forecasts be discontinued.
2. Seventy-two hour outlook - A 72 hour burn outlook shall be available up to 72 hours in advance of burns specified in Section 80145, Subsection (f), Title 17, CCR.
3. Ninety-six hour trend - A 96 hour burn trend shall be available up to 96 hours in advance of burns as specified in Section 80145, Subsection (f), Title 17, CCR.

E. Daily Burn Authorization System

1. A burn authorization shall be requested and obtained from the Control Officer, on a daily basis, before any prescribed burning may commence. To request such authorization, a burn operator shall submit a District-approved smoke management plan.
2. Burn authorizations for prescribed burning shall be granted on a first come-first served basis. To avoid conflict in burn planning, the Control Officer shall authorize no more than one burn on the same day in the same general area. The Control Officer may immediately rescind a burn authorization if meteorological conditions change such that adverse air quality impacts are likely, or if burning by a fire protection agency to abate an imminent fire hazard is required suddenly and unexpectedly in the same area.
3. Smoke management plan conditions shall be met at the time of burn ignition and shall be expected to be met for duration of the burn, regardless of issuance of a burn authorization. The burn operator shall be responsible for ensuring all conditions listed in the smoke management plan are met prior to ignition of, and during, the burn.
4. Multi day burns shall require District authorization on a daily basis and consultation with CARB to continue with the burn.
5. The District may cancel burn authorization any time before, or during, a prescribed burn if cancellation is necessary to protect ambient air quality per Section 80145, Subsection (g), Title 17, CCR.

IV. Special Requirements - Agricultural Burning

- A. Agricultural burning shall take place only on days permitted by public fire protection agencies having jurisdiction for purposes of fire control or prevention.
- B. Waste materials to be burned in open fires in agricultural operations, including prescribed burning, shall be free of waste not conforming to the definition of "Open Burning in Agricultural Operations.– The following materials shall not be considered agricultural waste: tires, rubbish, tar paper, plastic, treated wood, construction/demolition debris or material containing asbestos, weeds, shrubs and trees from nonproductive areas such as along roads and around buildings and waste foreign to land being cleared for agricultural use. Weeds, shrubs and trees in, or bordering, pastures or crop production areas or on land being cleared for the growing of crops or animals shall be considered to be agricultural waste.
- C. Waste materials to be burned in agricultural operations, including prescribed burning, shall be ignited as rapidly as practicable within applicable fire control restrictions.
- D. Waste materials to be burned in open fires in agricultural operations shall be arranged to burn with a minimum of smoke. Materials shall be loosely stacked to allow maximum drying in preparation for burning to provide good combustion. Materials shall be free of dirt and soil to the extent such dirt or soil will not hinder burning nor be carried into the air as particulate matter and shall be reasonably free of visible surface moisture.
- E. Waste materials to be burned in open fires in agricultural operations shall have been dried for the minimum periods listed below. These periods include time from drying or cutting to day of burning.
 - 1. Dry Cereals - 0 Days,
 - 2. Prunings and Small Branches - 3 Weeks, and
 - 3. Large Branches and Trees - 6 Weeks.
- F. The Control Officer may restrict agricultural burning to selected permittees on designated burn days if total tonnage to be ignited would discharge a volume of contaminants into the atmosphere sufficient to threaten public health.
- G. Agricultural burning may commence at any time after announcement of a burn day, but in no case shall it commence before sunrise. No additional waste material or ignition fuel shall be ignited or added to any fire after two hours before sunset.
- H. Wind direction at a burning site shall be such that smoke will not cause a public nuisance.
- I. Materials to be burned shall be ignited only by use of approved ignition devices. Tires, tar paper, plastic, dirty oils and other similar materials shall not be used.

V. Special Requirements - Field Crop Burning

- A. Cereal straw shall be ignited only by strip-firing into-the-wind or by backfiring except under a special permit issued by the District when and where extreme fire hazards are declared by a public fire protection agency to exist, or where crops are determined not to lend themselves to these techniques.
- B. No field crop burning shall commence before 10:00 am, nor after 5:00 pm of any day.

VI. Special Requirements - Range Improvement Burning

- A. No brush or unwanted trees shall be burned unless it has been brush treated at least six months prior to the burn, provided it is economically and technically feasible.
- B. If burning is to be done primarily for improvement of land for wildlife and game habitat, no permit shall be issued unless the applicant has filed with the District a statement from the Department of Fish and Game certifying the burn is desirable and proper. The Department of Fish and Game may specify the amount of brush treatment required.

VII. Special Requirements - Prescribed Burning and Prescribed Fires in Wildland and Wildland/Urban Interface Area

- A. The land manager shall submit a smoke management plan to the District for all burn projects greater than 10 acres in size or estimated to produce more than 1 ton of particulate matter. Smoke management plans must contain, at a minimum, the following information:
 - 1. Project name, location, size (acres), types and amounts of material to be burned;
 - 2. Expected duration of fire from ignition to extinction;
 - 3. Identification of responsible personnel, including telephone contacts;
 - 4. Identification and location of all smoke sensitive areas;
 - 5. Expected particulate matter emission calculations, including U.S. EPA approved calculation method;
 - 6. Identification of vegetation conditions and burn limitations to minimize smoke, including requirements for materials to be piled, where possible;
 - 7. If applicable, California Department of Fish and Game statement certifying the burn is desirable and proper;

8. Public notification procedures, including requirement for appropriate signage at burn sites and for reporting of public smoke complaints; and
 9. Procedures for permittees to report public smoke complaints to the District.
- B. If a natural ignition occurs on a no-burn day, such fire may be managed as a prescribed fire provided the Control Officer determines the following:
1. For smoke management purposes, the burn can be managed for resource benefit; or
 2. For periods of less than 24 hours, a reasonable effort has been made to contact the District, or if District staff are not available, CARB;
 3. After 24 hours, the District has been contacted, or if the District is not available, CARB has been contacted and concurs the burn can be managed for resource benefit.
- A “no-go– decision does not necessarily mean the fire must be extinguished, but does mean the fire cannot be managed as a prescribed fire.
- C. A burn project shall not occur unless all conditions and requirements stated in the smoke management plan are met prior to ignition on the date of the burn event, CARB and the District have both declared the day to be a burn day and the Control Officer has authorized the burn on the day of the burn.
- D. For naturally-ignited wildfires that are expected to exceed 10 acres, the land manager shall submit a smoke management plan that contains at a minimum, information required by in Section VII.A. and the following additional information:
1. A burn plan within 72 hours of the start of any naturally ignited wildland fire managed for source benefits that is expected to exceed 10 acres in size; and
 2. Description of source of ignition.
- E. For prescribed burn projects greater than 100 acres in size or estimated to produce more than 10 tons of particulate matter, the land manager shall submit a smoke management plan that contains at a minimum, information contained in Subsections VII.A. and VII.D. and the following additional information:
1. Identification of meteorological conditions necessary for burning;
 2. Smoke management criteria the land manager will use for making burn ignition decisions;
 3. Projections, including a map, of where smoke from burns is expected to travel, both day and night;
 4. Specific contingency actions (such as fire suppression or containment) to be taken if smoke impacts occur or meteorological conditions deviate from those specified

in the smoke management plan;

5. An evaluation of alternatives to burning considered. If an analysis of alternatives has been prepared as part of 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 shall be attached to the smoke management plan in satisfaction of this requirement.
- F. If smoke may impact smoke sensitive areas, smoke management plans shall include appropriate monitoring such as visual monitoring, ambient particulate matter monitoring or other monitoring approved by the District, as required by the District for the following burn projects:
1. Projects greater than 250 acres;
 2. Projects that will continue burning or producing smoke overnight;
 3. Projects conducted near smoke sensitive areas; or
 4. Where the Control Officer determines monitoring is necessary for public health and safety.
- G. The land manager shall coordinate daily with the District or CARB for multi day burns that may impact smoke sensitive areas, to affirm the burn project remains within conditions specified in the smoke management plan, or whether contingency actions are necessary.
- H. Alternate thresholds to those specified in Subsections VII.D., VII.E. and VII.F. and may be specified by the District where the Control Officer determines such alternative thresholds are necessary to protect public health.
- I. The land manager conducting a prescribed burn shall ensure all conditions and requirements stated in the smoke management plan are met on the day of the burn event and prior to ignition.
- J. The land manager shall submit a post-burn smoke management evaluation to the District for fires greater than 250 acres within 30 days of project completion. Such evaluation shall address whether smoke management plan objectives were met. This evaluation shall also address the following:
1. What were meteorological conditions (wind speed, direction, temperature, relative humidity (percent)), prior to, during and following the burn?
 2. Did the weather meet the prescription?
 3. Were there adverse smoke impacts? If so, where? How were impacts monitored and documented?

4. Were there complaints related to smoke impacts from the burn? If so, list them. How were complaints responded to and remedied?
 5. What went wrong, if anything, with the weather or smoke? How can this be improved upon for future burns?
- K. Vegetation to be burned shall be in a condition that will minimize smoke emitted during combustion when feasible, considering fire safety and other factors.
 - L. Material to be burned shall be windrowed or piled where possible, unless good silvicultural practices or ecological goals dictate otherwise.
 - M. Piled material to be burned shall be prepared so it will burn with a minimum of smoke.
 - N. The permit applicant shall file with the District a statement from the Department of Fish and Game certifying the burn is desirable and proper if the burn is to be done primarily for improvement of land for wildlife and game habitat. The Department of Fish and Game may specify amount of brush treatment requirement, including any other conditions it deems appropriate.

VIII. Exemptions

Upon receipt of a burning permit from the appropriate fire control agency, tumbleweeds and star thistle may be burned provided no other feasible or practical method is available, an approved ignition device is used and a public nuisance is not created.

IX. Enforcement Procedures

- A. Designated fire protection agencies or the District shall enforce provisions of this Rule by not allowing agricultural burning unless the person responsible for the burn has a valid agricultural burning permit.
- B. Fire protection agencies having the required authority shall issue a notice of violation or citation or shall order other corrective action when a permit violation occurs.
- C. Smoke complaints or other air pollution complaints not involving permit violations, or for any violation found by an agency not having authority to take enforcement action, shall be referred to the District for investigation.

X. Meteorological Criteria for Regulating Agricultural and Prescribed Burning

Meteorological criteria for the Mojave Desert Air Basin at Section 80311 of Title 17 of the California Code of Regulations, Subchapter 2, Smoke Management Guidelines for Agricultural and Prescribed Burning are incorporated herein by reference.