

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **Preliminary Staff Report for:**

**Proposed Amended Rule 444 – Open Burning**

**Proposed Amended Rule 208 – Permit and Burn Authorization for  
Open Burning**

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**September 21, 2001**

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**TABLE OF CONTENTS**

Executive Summary	1
Background	2
Legislative Authority	2
Staff Proposal	2
Emissions Inventory	5
Emission Reductions	6
Cost-Effectiveness	7
Conclusion	7
Comparative Analysis	7
California Environmental Quality Act	8

Appendix A: Proposed Amended Rule 444 - Open Burning

Appendix B: Proposed Amended Rule 208 - Permit and Burn Authorization For Open Burning

**EXECUTIVE SUMMARY**

The South Coast Air Basin has a long history of smoke abatement. Many of the technological advances and strategies that exist today stem from earlier efforts by the District and its predecessor agencies. These early efforts include a ban on landfill burning at approximately 50 municipal and private landfills in the 1940s, a ban on residential burning in Los Angeles County in the 1950s, and the subsequent development of a cooperative effort between the four county air districts, California Air Resources Board (CARB), public fire protection agencies, city and county governments, and various public and private interests.

Rule 444 is being amended to further enhance these efforts by incorporating the Smoke Management Guidelines (Guidelines) for Agricultural and Prescribed Burning as set forth in the California Code of Regulations, Title 17, Sections 80100 – 801330 adopted by the California Air Resources Board at its meeting on March 23, 2000. These Guidelines required air districts to develop their smoke management programs including:

- registering and permitting of agricultural and prescribed burns;
- meteorological and smoke management forecasting;
- daily burn authorization; and
- enforcement.

Rule 444 is also being amended to incorporate provisions of the revised 1997 and 1999 Air Quality Management Plan (AQMP) control measure Waste-03 (WST-03) that sets limitations to open burning when the California one-hour ozone standard is predicted to be exceeded. In addition, Rule 444 is further being amended to address the considerations for the U.S. Environmental Protection Agency' (EPA) limited disapproval of the rule listed in the Federal Register, Vol. 65, No. 144, on July 26, 2000.

The primary changes to Rule 444 will:

- stipulate that all open outdoor fires will require an AQMD burn permit in addition to any required fire agency permits excluding specific types of open fires listed in the rule;
- clarify rule applicability;
- clarify the prohibition on residential burning and provide specific requirements for selected categories of open burning;
- refine the permissible window for burning ignition;
- require Smoke Management Plans on all projects greater than 10 acres; and
- allow open burning only when meteorological conditions are acceptable and ozone levels are below certain thresholds;
- establish thresholds for daily maximum burn acreage; and
- set criteria for burn prioritization.

The proposed amendments would result in emission reductions and minimize impacts of health damaging particulates on affected communities by stringent monitoring of conditions during

prescribed burns, enhancing public notification procedures, and encouraging alternatives to open burning whenever possible. The proposed amendments would also reduce emissions of volatile organic compounds, oxides of nitrogen and carbon monoxide on days that ozone concentrations are predicted to exceed the California one-hour ozone standard.

## **BACKGROUND**

Rule 444 – Open Fires was adopted on October 8, 1976 to reduce visible emissions and minimize public nuisance from smoke emissions. The rule was the Los Angeles County Air Pollution Control District’s (APCD) Rule but incorporated elements of all of the four county APCD rules on open burning in effect at the time.

Rule 444 was last amended on October 2, 1987 to add a provision to the rule for Wildlife Vegetative Management Burning.

## **LEGISLATIVE AUTHORITY**

The California Legislature created the South Coast Air Quality Management District (AQMD) in 1977 (The Lewis-Presley Air Quality Management Act, Health and Safety Code Section 40400 et seq.) as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin). By statute, the AQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all state and federal ambient air quality standards for the Basin [California Health and Safety Code Section 40460(a)]. Furthermore, the AQMD must adopt rules and regulations that carry out the AQMP [California Health and Safety Code Section 40440(a)].

## **STATUTORY AUTHORITY AND REFERENCE**

Adoption of the amendments to title 17, Agricultural Burning Guidelines, is proposed under the authority granted to the ARB in sections 39515, 39516, 39600, 39601, 39607.5, 41856, and 41859 of the Health and Safety Code. The purpose of the amendments is to implement, interpret, and make specific sections 39011, 39025, 39053, 39515, 39516, 39600, 39601, 41850, 41851, 41865, 41852-41859, and 41861-41863 of the Health & Safety Code.

## **STAFF PROPOSAL**

The District plans to amend Rule 444 to incorporate the modifications made to Title 17 as well as address comments from US EPA on the current rule's deficiencies as published in their limited disapproval of the rule listed in the Federal Register, Vol. 65, No. 144, on July 26, 2000. Rule 444 is also being amended to incorporate provisions of the revised 1997 and 1999 AQMP control measure WST-03 that sets limitations to open burning when the California one-hour ozone standard is predicted to be exceeded.

This section provides an overview of the key proposals to amend Rule 444.

*Modifications to Rule Applicability*

The proposed amendments to Rule 444 will expand rule the applicability section to include outdoor burning in the following categories:

- disposal by open detonation,
- pyrotechnics for the creation of special effects,
- residential burning,
- demonstrations to test the efficacy of fire retardant materials, and
- disposal of contraband by open combustion.

*Inclusion of Definitions*

A new section will be added to Rule 444 to provide definitions of key parameters that are included in the amended rule language. Of significant noteworthiness are the revised burn day designations that incorporate modified air quality criteria thresholds. The proposed modifications to the burn day designations will implement control measure WST-03 "Emissions Reduction From Waste Burning" identified in the 1997 and 1999 revisions to the AQMP. While the goal of Rule 444 is to minimize the impacts of smoke from open fires, open burning does contribute emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) which are the primary building blocks of tropospheric ozone. These proposed definitions include:

- **Permissive Burn Day:** a day on which open burning is not prohibited by the CARB or Executive Officer of the District. A permissive burn day is declared when (1) the meteorological criteria specified in Title 17, Section 80220 are forecasted to be met, and (2) a California 1-hour ozone standard (0.09 ppm) is not predicted to be exceeded in the Basin.
- **Marginal Burn Day:** a day when open burning for individual projects is restricted to designated source/receptor areas and is not prohibited by the CARB or Executive Officer of the District. A marginal burn day is declared when (1) the meteorological criteria specified in Title 17, Section 80220 are forecasted to be met, and (2) the California 1-hour ozone standard (0.09 ppm) is not predicted to be exceeded in the designated source/receptor area, and (3) no California 1-hour Ozone Health Advisory Episodes are predicted elsewhere in the Basin.

- No Burn Day: a day on which open burning is prohibited by the CARB or Executive Officer of the District. A no burn day is declared when either (1) the meteorological criteria specified in Title 17, Section 80220 are forecasted not to be met, or (2) a California 1-hour Ozone Health Advisory Episode (0.15 ppm) is predicted in the Basin.

#### *Modifications to Requirements*

Proposed amendments to Rule 444 will provide specific requirements and prohibitions for conducting open burning in the District. Selected key modifications to the rule include:

- clarifying the prohibition of residential burning, disposal by open detonation, burning for conversion of land to non-agricultural use;
- clarifying the requirements for abatement of declared fire hazards, fire protection/suppression training, pyrotechnics for the creation of special effects, research and testing of fire retardant materials, and disposal of contraband by law enforcement agencies;
- refining the window for burn ignition and cessation of burning to not commence earlier than 8:00 A.M. or later than 12:00 noon and extinguish all burning, including smoldering, by no later than 4:00 P.M.;
- providing drying time criteria for agricultural waste; and
- requiring submission of smoke management plans increasing in specificity for planned burns sized greater than 10 and 100 acres.

#### *Establishment of a Maximum Daily Burn Acreage and Burn Prioritization Criteria*

Proposed amendments to Rule 444 will include provisions to prioritize burn authorization and establish a limit on the daily total amount of burning to be conducted in the Basin and Coachella Valley. The proposed daily burn acreage limits for the Basin and Coachella Valley are as follows:

- Basin
  - 150 acres for prescribed wildland and range burning,
  - 150 acres for agricultural burning,
- Coachella Valley
  - 5 acres for prescribed wildland and range burning,
  - 35 acres for agricultural burning.

As noticed in the Federal Register, Vol. 65, No. 144, Wednesday, July 26, 2000, US EPA determined that Rule 444 was deficient in that it did not meet the requirement of Reasonable Achievable Control Measures (RACM) for Prescribed Burning because the rule did not base approval of a burn on an evaluation of the airshed's capacity to disperse PM10 emissions from all types of open burning. The ruling further cited the lack of incentives to both encourage burner training and implement emission reduction techniques. While the meteorological criteria and air quality restrictions currently identified in Title 17 and Rule 444 provide a framework for estimating PM10 pollution carrying capacity, specific acreage limits and criteria for authorizing burn priority are absent.

The proposed amendments to Rule 444 would prioritize burn authorization for prescribed wildland burns based upon (1) the burner's demonstrated level of training identified in the burn implementation and smoke management plans, and (2) the measures identified in the smoke management plan proposed to reduce pollutant emissions. This method of burn authorization prioritization would serve as an incentive to burners to ensure that they have received accredited training and have considered feasible alternatives to burning and techniques to reduce smoke emissions.

As a further incentive, an exemption from the daily prescribed burn acreage limits for the Basin and Coachella Valley has been included when a land manager has (1) demonstrated that the prescribed burn is required to reduce a fire hazard that jeopardizes public health or safety, and (2) a satisfactory smoke management plan has been submitted to and approved by the District.

#### *Modifications to Exemptions*

The proposed amendments to Rule 444 will provide clarification of several exemptions. These include clarification of the:

- exemptions to fire protection agencies for limited fire protection/suppression training (burns of no more than 30 minutes) on no burn days and the requirement for burn authorization form AQMD if clean fuels are burned;
- exemptions for fireworks displays and pyrotechnics used at theme parks; and ,
- exemptions to prescribed methods of igniting field crops when said practice constitutes an extreme hazard by a public fire protection agency, and backfires set by a fire protection agency to save life and property.

#### **EMISSIONS**

The 1997 Air Quality Management Plan identified future sources of PM10 emissions. PM10 emissions from agricultural burning, prescribed range management burning and prescribed forest management burning in the Basin were estimated to total approximately 11 tons per day (from the annual average inventory) for each of the milestone years of 2000, 2006 and 2010. Similar estimates of PM10 emissions from agricultural and wildland burning for the Coachella



Valley were estimated to total approximately 0.6 tons per day (split equally by category) in the Coachella Valley PM10 Plan. For the purpose of developing an equitable system of burn allocation for the Basin it is assumed that the total PM10 emissions are allocated at 1.0 TPD (365 tons per year, TPY) for agriculture and 10 TPD (3650 TPY) for prescribed wildland and range management burning.

Estimates of the amount of PM10 emissions that are released from burning one acre of wildland in Southern California vary according to the type of vegetation and density of growth. A review of the CARB "Proposed Amendments to California's Agricultural Burning Guidelines: Staff Report," US EPA's AP-42 Emissions Workbook and discussions with California Department of Forestry staff, provided an average estimate of approximately 0.1 tons of PM10 emissions are released per acre burned. For agricultural burning of crops such as wheat straw emissions of PM10 were estimated at approximately 0.01 tons per acre burned. Typical agricultural burns in the Basin and Coachella Valley are for small piles of cut waste material not consisting of a full acre of produce. Using these estimated PM10 emissions rates per acre burned, approximately 100 wildland acres in the Basin could be burned by prescribed fires each day and an additional 100 acres of agricultural burning could take place. (Daily estimates for the Coachella Valley would allow 3 acres of prescribed burning and 30 acres of agricultural burning.

Based on the proposed modifications to the air quality criteria for determining burn day designation, it is estimated that approximately 125 days per year will be declared either marginal or no burn days for the Basin thus restricting or prohibiting burning. This translates to an average burn season consisting of about 240 days. If burning is restricted solely to permissive burn days then approximately 150 acres could be burned daily within the scope predicted by the AQMP future year's emissions inventory. In addition, the total daily acreage available for agricultural burning would increase to 150 acres. Therefore, a daily maximum of 300 burn acres would be available for consumption in the Basin.

The proposed amendments to the burn day designation would have less impact on the Coachella Valley restricting or prohibiting burning on approximately 40 days per year. Thus, for the Coachella Valley, the daily maximum acreage available for burning in each category could increase by approximately 12 percent for a total combined daily maximum of 40 acres.

## **EMISSIONS REDUCTIONS**

The proposed amendments to Rule 444 would result in emission reductions and minimize impacts of health damaging particulates on affected communities by stringent monitoring of conditions during prescribed burns, enhancing public notification procedures, and encouraging alternatives to open burning whenever possible. The proposed amendments would also reduce emissions of volatile organic compounds, oxides of nitrogen and carbon monoxide on days that ozone concentrations are predicted to exceed the California one-hour ozone standard.

**COST-EFFECTIVENESS**

A cost-effectiveness analysis is required by Section 40440.8 of the California Health and Safety Code and determines the cost to comply with new regulatory requirements. The costs to burners of implementing the CARB Guidelines was discussed in the "Proposed Amendments to California's Agricultural Burning Guidelines" Staff Report dated February 2000. These additional costs were attributable to cancelled burn projects. For example, a project which was planned for several days may be cancelled on the morning of the burn due to changes in meteorological and air quality conditions. While staff understands that such costs may be incurred, every effort will be made in planning and forecasting to minimize these occurrences.

**CONCLUSION**

In general, AQMD's Smoke Management Program has been very successful at alleviating impacts to the public from burn activities. However, the potential public health risk associated with burn activities is significant. Smoke exposure has been associated with adverse health effects particularly among individuals with respiratory and cardiovascular illnesses. Smoke can be a major contributor to high levels of particulates in the atmosphere when a significant amount of burning occurs in any one day. The proposed amendments to Rule 444 and revisions to the Smoke Management Program set forth guidelines to improve the existing program and allow AQMD more input into where and when burns take place.

Some individual burners may be adversely affected by the proposed requirements, specifically in the event that a project must be cancelled. However, cooperative efforts between AQMD, the burners, and the public should minimize these occurrences.

Staff concludes that the proposed amendments are option orientated, feasible, cost effective, and provide a sufficient lead-time for implementation. The emission reductions achieved will also contribute to SCAQMD's clean air goals as mandated by Federal and State law.

**COMPARATIVE ANALYSIS**

The proposed amendments to Rule 444 do not conflict with any existing AQMD or federal requirements.

**DRAFT FINDINGS UNDER THE CALIFORNIA HEALTH AND SAFETY CODE**

Before adopting, amending, or repealing a rule, the California Health and Safety Code requires the AQMD to adopt written findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Section 40727. The draft findings are as follows:

**Necessity** - The AQMD Governing Board has determined that a need exists to amend Rule 444 to control and reduce particulate matter emissions by administering a Smoke Management Program.

**Authority** - The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from the California Health and Safety Code Sections 39002, 40000, 40001, 40702, and 41508.

**Clarity** - The AQMD Governing Board has determined that the Proposed Amended Rule 444 is written or displayed so that its meaning can be easily understood by persons directly affected by it.

**Consistency** - The AQMD Governing Board has determined that Proposed Amended Rule 444 is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, federal or state regulations.

**Non-Duplication** - The AQMD Governing Board has determined that the Proposed Rule 444 does not impose the same requirements as any existing state or federal regulations, and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the AQMD.

**Reference** - In adopting this regulation, the AQMD Governing Board references the following statutes which the AQMD hereby implements, interprets or makes specific: California Health and Safety Code Sections 40001 (rules to achieve ambient air quality standards), 40440(a) (rules to carry out the AQMP) and 40440(c) (cost-effectiveness), 40920.6 (potential control options and incremental cost-effectiveness), 80100 through 80330 (Title 17: Smoke Management Guidelines for Agricultural and Prescribed Burning), and Federal Clean Air Act Section 172(c)(1)(RACT).

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

The SCAQMD has reviewed the proposed project pursuant to state CEQA Guidelines §15002(k)(1). The proposed amendments to Rule 444 would codify and would implement the Smoke Management Guidelines for Agricultural and Prescribed burning, which are already implemented as a matter of policy relative to open burning by the SCAQMD, so these provisions would generate no new adverse secondary environmental impacts. By limiting open burn operations per day, the proposed amendments will result in air quality benefits and since it can be seen with certainty that there is no possibility that the proposed project in question has the potential to have a significant adverse effect on the environment, the proposal is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) - Review for Exemption. A Notice of Exemption, in accordance with CEQA Guidelines Section 15062, will be prepared for the proposed project and will be filed with the county clerks immediately following the adoption of the proposed amendments to the rule.

**Appendix A**

**Proposed Amended Rule 444**

**Open Burning**

(PAR444 – 12/14/01)

**DRAFT PROPOSED AMENDED RULE 444 – OPEN FIRES-BURNING**

(a) Purpose

~~A person shall not burn or allow the burning of combustible materials in an open outdoor fire within the District without first obtaining a written permit, as required by Rule 208, for such burning from the Executive Officer and, when required, from the local fire protection agency. A burning permit may be granted only:~~

- ~~(1) Where a fire hazard, to life or property, is declared by the local fire protection agency and such fire hazard cannot be abated by any other means, or~~
- ~~(2) For agricultural burning as defined in Rule 102, Definition of Terms, or~~
- ~~(3) For the purpose of disposing of Russian thistle (Salsola kali), or~~
- ~~(4) For the burning of dry cotton gin waste infected with an agricultural pest hazardous to nearby agricultural operations and upon order of the County Agricultural Commissioner, or~~
- ~~(5) For the burning of infectious waste other than hospital waste upon order of the County Health Officer to abate a public health hazard.~~

The purpose of this rule is to ensure open burning in the District is conducted in a manner that minimizes emissions and smoke and is managed consistent with state and federal law.

(b) Applicability

~~Notwithstanding the provisions of subsection (a), a person may burn or allow the burning of combustible materials in an open outdoor fire for any of the following purposes, provided such fire is set by, under the jurisdiction of, or pursuant to the requirements of, a fire protection agency:~~

- ~~(1) For the instruction of public or industrial employees in the methods of fighting fires, or~~
- ~~(2) For the purpose of removing forest debris as a part of a forest management or wildlife or game habitat improvement, or~~
- ~~(3) Backfires necessary to save life or valuable property pursuant to Section 4462 of the \_\_\_\_\_ Public \_\_\_\_\_ Resources \_\_\_\_\_ Code.~~

**PAR 444 (Cont.)**

~~(4) Wildland vegetation management burning as defined, Title 17, California Administrative Code, Section 80100.~~

The provisions of this rule apply to any person conducting or allowing any open burning including, but not limited to:

- (1) Agricultural Burning
- (2) Disposal of Russian thistle (Salsola kali or “tumbleweed”)
- (3) Prescribed Burning
- (4) Fire Prevention/Suppression Training
- (5) Open Detonation or use of pyrotechnics
- (6) Fire Hazard Removal
- (7) Disposal of Infectious Waste, other than hospital waste
- (8) Research of testing materials, equipment or techniques
- (9) Disposal of contraband
- (10) Residential Burning

**(c) Definitions**

~~The Executive Officer shall be notified prior to burning conducted under the provisions of subsections (b)(1) or (b)(2).~~

- (1) AGRICULTURAL BURNING means open burning of vegetative materials produced wholly from the growing and harvesting of crops in agricultural operations, including the burning of grass and weeds in fence rows, ditch banks and berms in non-tillage orchard operations, fields being prepared for cultivation, agricultural wastes, and the operation or maintenance of a system for the delivery of water for agricultural operations.
- (2) AGRICULTURAL OPERATIONS means any operation occurring on a ranch or farm directly related to the growing of crops, or raising of fowl or animals for the primary purpose of making a profit or for a livelihood, or of conducting agricultural research or instruction by an educational institution.
- (3) AGRICULTURAL WASTES means unwanted or unsalable materials produced wholly from agricultural operations directly related to the growing of crops or animals for the primary purpose of making a profit or for a livelihood. The term does not include items such as, plastic, rubber, ornamental or landscape vegetation, shop wastes, construction and demolition material, garbage, oil

**PAR 444 (Cont.)**

filters, tires, tar paper, pesticide and fertilizer containers, broken boxes, pallets, sweat boxes, packaging material, packing boxes or any other material produced in the packaging or processing of agricultural products; orchard or vineyard waste or any other material, generated as a result of land use conversion to nonagricultural purposes.

- (4) APPROVED IGNITION DEVICES means those instruments or materials that will ignite agricultural waste without the production of black smoke by the ignition device. This would include such devices using liquid petroleum gas, butane, propane, or diesel oil burners and flares where the device produces a flame and the flame is then used for ignition.
- (5) FIRE HAZARD means a hazardous condition involving combustible, flammable, or explosive material, that represents an imminent and substantial threat to life or property if not immediately abated, as determined by the local fire protection agency.
- (6) FIRE PREVENTION/SUPPRESSION TRAINING means the instruction of employees in the methods of preventing or suppressing fires.
- (7) FIRE PROTECTION AGENCY means any agency with the responsibility and authority to protect people, property, and the environment from fire, and having jurisdiction within the District.
- (8) MARGINAL BURN DAY is a day open burning for individual projects is restricted to designated source/receptor areas and is not prohibited by the CARB or Executive Officer of the District. A marginal burn day is declared when (1) the meteorological criteria specified in Title 17, Section 80220 are forecasted to be met, and (2) the California 1-hour ozone standard (0.09 ppm) is not predicted to be exceeded in the designated source/receptor area, and (3) no California 1-hour Ozone Health Advisory Episodes are predicted elsewhere in the District.
- (9) NO-BURN DAY is a day on which open burning is prohibited by the CARB or Executive Officer of the District. A no burn day is declared when either (1) the meteorological criteria specified in Title 17, Section 80220 are forecasted not to be met, or (2) the California 1-hour Ozone Health Advisory Episode (0.15 ppm) is predicted in the District.
- (10) OPEN BURNING/COMBUSTION/OPEN DETONATION means the ignition and subsequent burning, or ignition, rapid decomposition and subsequent burning of solid, liquid, or gaseous materials, outside of a combustion chamber with or without a visible flame and not directed through a chimney or flue.

**PAR 444 (Cont.)**

- (11) PERMISSIVE BURN DAY is a day on which open burning is not prohibited by the CARB or Executive Officer of the District. A permissive burn day is declared when (1) the meteorological criteria specified in Title 17, Section 80220 are forecasted to be met, and (2) the California 1-hour ozone standard (0.09 ppm) is not predicted to be exceeded in the District.
- (12) PRESCRIBED BURNING is planned open burning conducted by a public agency, or through a cooperative agreement or contract involving a public agency to achieve the specific objectives identified on lands selected in advance for removal of:

  - (A) vegetation from land predominantly covered with chaparral, trees, grass, or standing brush; or
  - (B) forest vegetation or debris for the purposes of forest protection; or
  - (C) brush, weeds, arundo, or other plant matter to promote a healthier environment for plant or animal species or to re-establish native plant species; or
  - (D) disease and pest prevention
- (13) RESIDENTIAL BURNING means open burning for the purposes of disposing of combustible or flammable solid waste from a specific residence, from property around the dwelling, property where material originated, from household or immediate vicinity of the house or yard.
- (14) SMOKE MANAGEMENT PLAN means a document prepared for each open burning event or project by land managers or fire managers that provides the information and procedures to minimize smoke impacts.

**(d) Requirements and Prohibitions**

~~Open burning pursuant to subsections (a), (b)(1), or (b)(2) is not allowed when prohibited by Regulation VII or in any Geographical Area of the District when the Executive Officer prohibits open burning in that Area due to adverse meteorological conditions determined pursuant to section (f), except as provided in section (e).~~

- (1) A person shall not conduct or allow open burning:

  - (A) Unless the Executive Officer has declared the day as a permissive burn day and such burning is not prohibited by a public fire protection agency; and
  - (B) Without first obtaining a written permit from the local fire protection agency and the Executive Officer when required; and



**PAR 444 (Cont.)**

- (C) Without first receiving authorization from the Executive Officer for each day for each open burning event.
- (2) The Executive Officer may authorize open burning for:

  - (A) Agricultural burning.
  - (B) Prescribed burning.
  - (C) Disposal of Russian thistle.
  - (E) Abatement of a fire hazard that the local fire protection agency determines cannot be abated by an economically, ecologically and logistically viable option.
  - (F) Disposal of waste infected with an agricultural pest or disease hazardous to nearby agricultural operations and upon the order of the County Agricultural Commissioner.
  - (G) Disposal of infectious waste infected, other than hospital waste, upon the order of the County Health Officer to abate a public health hazard.
  - (H) The use of pyrotechnics for creation of special effects during filming of motion pictures, videotaping of television program or other commercial filming or video production activities.
  - (I) Disposal of contraband in the possession of local, state, or federal law enforcement personnel provided they demonstrate that open burning is the only reasonably available method for safely disposing of the material.
  - (J) Fire prevention/suppression training (NOTE: Where training involves the burning of existing structures, notifications and compliance with all other requirements of Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities shall be required).
  - (K) The purpose of researching or testing fire retardant properties of materials (or enclosures) or the efficacy of fire suppression techniques or devices.
- (3) A person is prohibited from open burning for:

  - (A) Residential burning.
  - (B) Disposal of waste, except as specified in (d)(2) above, including hospital waste.
  - (C) Materials generated as a result of land use conversion for non-agricultural purposes.
  - (D) Disposal of materials from the production or storage of military ordnance, propellants, or pyrotechnics unless the local fire agency

**PAR 444 (Cont.)**

- determines that transportation to burning is the only reasonably available method for safely disposing of the material.
- (E) Backfires, except those set by fire protection agencies, for the purpose of saving life or property.
- (4) A person shall not commence or allow the commencement of open burning before 8:00 a.m. PST or after 12:00 p.m. PST on any day and shall conclude such burning before 4:00 p.m. PST.
- (5) A person shall use only approved ignition devices to ignite open burning.
- (6) Additional requirements for agricultural burning
- (A) A person shall not conduct or allow the open burning of agricultural waste unless it has been allowed to dry for the following minimum times:
- |   |                |
|---|----------------|
| (i) <u>Trees and large branches:</u>                    | <u>6 weeks</u> |
| <u>(3" to less than 8" diameter)</u>                    |                |
| (ii) <u>Prunings and small branches:</u>                | <u>4 weeks</u> |
| <u>(1" to less than 3" diameter)</u>                    |                |
| (iii) <u>Fine fuels (.25" to less than 1" diameter)</u> | <u>3 weeks</u> |
| (iv) <u>Very fine fuels (less than .25"):</u>           | <u>10 days</u> |
- (B) A person shall not conduct or allow the open burning of agricultural waste unless it is reasonably free of dirt, soil, visible moisture and is arranged so that it will burn with a minimum of smoke.
- (C) A person shall ignite Rice, barley, oat and wheat straw only by strip-firing into the wind unless a fire protection agency declares such actions would constitute a fire hazard.
- (7) Additional requirements for prescribed burning
- (A) A person shall conduct or allow prescribed burning only when the fires are set by, under the jurisdiction of, or pursuant to the orders or requirements of a fire protection agency.
- (B) Prior to conducting or allowing prescribed burning for any project greater than 10 acres or estimated to produce more than one ton of particulate matter, a person shall have a Smoke Management Plan approved in writing by the Executive Officer. At a minimum, the Smoke Management Plan shall contain the following information:
- |  |
|--|
| (i) <u>Location, types, and amounts of material to be burned;</u>      |
| (ii) <u>Expected duration of the fire from ignition to extinction;</u> |

**PAR 444 (Cont.)**

- (iii) Identification of responsible personnel, including telephone contacts; and
- (iv) Identification and location of all smoke sensitive areas.
- (C) Prior to conducting or allowing prescribed burning for any project greater than 100 acres or estimated to produce more than 10 tons of particulate matter are, a person shall have a Smoke Management Plan approved in writing by the Executive Officer. At a minimum, the Smoke Management Plan shall contain the following information:
  - (i) Location, types, and amounts of material to be burned; and
  - (ii) Expected duration of the fire from ignition to extinction; and
  - (iii) Identification of responsible personnel, including telephone contacts; and
  - (iv) Identification and location of all smoke sensitive areas; and
  - (v) Identification of meteorological conditions necessary for burning; and
  - (vi) The smoke management criteria the land manager or his/her designee will use for making burn ignition decisions; and
  - (vii) Projections, including a map, of where the smoke from burns are expected to travel, both day and night; and
  - (viii) 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; and
  - (ix) An evaluation of and consideration of economically, and logistically viable options; and
  - (x) Discussion of public notification procedures.
- (D) The Executive Officer shall prioritize burn authorization criteria based upon:
  - (i) the burner's demonstrated level of training identified in the burn implementation and smoke management plans; and
  - (ii) the measures identified in the smoke management plan proposed to reduce emissions.

**PAR 444 (Cont.)**

(E) Notwithstanding (D)(1)(A), the Executive Officer may allow prescribed burning on marginal burn days based upon the burn authorization criteria of (d)(7)(D) above, and the source receptor area of the prescribed burn.

(e) The Executive Officer may allow the Maximum Daily Burn Acreage for Agricultural Burning and Prescribed Burning as follows:

~~Open burning pursuant to subsection (b)(1) is allowed in a geographical area of the District where open burning would otherwise be prohibited due to adverse meteorological conditions determined pursuant to subsection (f), provided such burning is for training fires of 30 minutes duration each or less using as fuel only clean, not waste, liquified petroleum gas or a petroleum liquid having an API gravity of at least 30.~~

(1) The maximum daily burn acreage limits for all areas within the District jurisdiction, excluding the Coachella Valley, are as follows:

(A) 150 acres for prescribed wildland and range burning.

(B) 150 acres for agricultural burning.

(2) The maximum daily burn acreage limits for the Coachella Valley are as follows:

(A) 5 acres for prescribed wildland and range burning.

(B) 35 acres for agricultural burning.

(3) The provisions of this subdivision shall not apply to prescribed burning when a land manager has:

(A) demonstrated that the prescribed burn is required to reduce a fire hazard that jeopardizes public health or safety; and

(B) a satisfactory smoke management plan has been submitted and approved by the District.

(f) Exemptions

~~The Executive Officer shall, for each Geographical Area, determine meteorological conditions which will cause open burning to have an adverse effect on the ambient air quality in that Area. A list of the geographical areas and specific meteorological conditions for each Area shall be maintained at the District Headquarters and shall be available to the public.~~

(1) The provisions of (d)(1) and (d)(4) of this rule shall not apply to backfires set to save life or valuable property when conducted by a fire protection agency pursuant to Section 4462 of the Public Resources Code.

**PAR 444 (Cont.)**

- (2) Fire Prevention/Suppression Training conducted by fire protection agencies are exempt from the provisions of (d)(1)(A) and (d)(1)(B) provided each training fire is no more than 30 minutes duration.
  - (3) Fire Prevention/Suppression Training conducted on permissive burn days are exempt from the provisions of (d)(1) provided each fire is no more than 30 minutes duration and each fire uses exclusively clean fuels, liquefied petroleum gas or a petroleum liquid having an API gravity of at least 30.
  - (4) The provisions of (d)(1)(C) shall not apply to open burning of Russian thistle.
  - (5) The provisions of this rule shall not apply to:

    - (A) Open burning for the purpose of observing religious rites, conducting patriotic displays (such as retiring national or state flags), and social or celebration events at schools and universities.
    - (B) Open burning of natural gas, propane, untreated wood, or charcoal for the purpose of:

      - (i) preparation or warming of food for human consumption; or
      - (ii) generating warmth at a social gathering.
    - (C) Open burning located on islands 15 miles or more from the mainland coast.
    - (D) Fireworks displays.
    - (E) Pyrotechnics used for creation of special effects at theme parks.
    - (F) Detonation of explosives during:

      - (i) quarry or mining operations; or
      - (ii) bomb disposal by a law enforcement agency; or
      - (iii) the demolition of buildings or structures.
- ~~(g) — The provisions of this rule shall not apply to recreational fires, ceremonial fires, cooking fires, or open fires on islands located 15 miles or more from the mainland coast.~~
- ~~(h) — Wildland Vegetation Management Burning~~
- ~~(1) — Wildland vegetation management burning shall not be conducted until an implementation plan is approved by the Executive Officer. Such plan shall:~~

    - ~~(A) — Apply to all burning which meets the definition of wildland vegetation management burning, regardless of whether such burning also meets~~

**PAR 444 (Cont.)**

~~another definition in Title 17, Section 80100 of The California Administrative Code.~~

- ~~(B) Limit the ignition of fires to approved devices.~~
- ~~(C) Regulate the total acreage or tonnage of vegetation that may be burned each day within the District.~~
- ~~(D) Regulate burning or require mitigation when the meteorological conditions could otherwise cause smoke to create or contribute to an exceedance of a state or federal ambient air quality standard or cause a public nuisance.~~
- ~~(E) Require the vegetation to be burned to be free of tires, rubbish, tar paper or construction debris, and reasonably free of dirt or soil.~~

## **Appendix B**

### **Proposed Amended Rule 208**

#### **Permit and Burn Authorization For Open Burning**

(Adopted October 8, 1976)(Amended January 5, 1990)

(PAR 208 - 1/18/01)

**DRAFT PROPOSED AMENDED RULE 208. - PERMIT AND BURN  
AUTHORIZATION FOR OPEN BURNING**

A person, required to obtain a permit for open burning pursuant to Rule 444, shall not set or allow any open outdoor fire without first having applied for and been issued a: ~~written permit for such fire by the Executive Officer.~~

- (1) written permit for such fire by the local fire protection agency and the Executive Officer when required; and
- (2) burn authorization from the Executive Officer for each day of burning.



