

State of California  
AIR RESOURCES BOARD

Resolution 83-7

May 26, 1983

Agenda Item No.: 83-6-1

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board (the "Board") to adopt standards, rules and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Section 41850 of the Health and Safety Code provides that agricultural burning be reasonably regulated and not be prohibited;

WHEREAS, Section 41855 of the Health and Safety Code requires the Board to determine and designate from meteorological data the days when agricultural burning shall be prohibited in each air basin;

WHEREAS, Sections 41856 and 41857 of the Health and Safety Code direct the Board to promulgate guidelines for the regulation and control of agricultural burning for each air basin which are based on meteorological data, the nature and volume of materials to be burned, and the probable effect of such burning on the ambient air quality within the basins affected;

WHEREAS, Section 41858 of the Health and Safety Code provides that, in adopting the guidelines, the Board shall consider their economic and technical feasibility, including their probable effect on agricultural production in the air basin affected;

WHEREAS, Section 41859 of the Health and Safety Code provides that the Board shall continuously review the guidelines it has promulgated and may modify, repeal, or alter such guidelines if scientific and technological data indicate that such changes are warranted;

WHEREAS, Section 41863 of the Health and Safety Code provides that each basinwide coordinating council and district shall include a component for the regulation and control of agricultural burning pursuant to the Board's guidelines in its implementation plan and program;

WHEREAS, the Board has established Agricultural Burning Guidelines and Meteorological Criteria in Sections 80100-80330 of Title 17, California Administrative Code;

WHEREAS, under Sections 80150, 80250, and 80320 of Title 17, California Administrative Code, agricultural burning in the Sacramento Valley Air Basin and the portion of Placer County under 1,500 feet msl elevation (collectively the "Sacramento Valley Air Basin") is subject to nonvariable acreage limitations on permissive burn days;

WHEREAS, Board staff has developed, in coordination with the Sacramento Valley Basinwide Air Pollution Control Council and its Technical Advisory Committee, proposed amendments to Sections 80150, 80250, and 80320 of Title 17, California Administrative Code, which would vary on a daily basis the maximum number of acres that can be burned in the Sacramento Valley Air Basin on permissive burn days based on existing and expected meteorological and air quality conditions, and which would provide for establishing daily acreage limits in each of the districts in the Sacramento Valley Air Basin;

WHEREAS, the amendments proposed by Board staff would establish a regulatory program similar to the test agricultural burning program now in effect in the Sacramento Valley Air Basin;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project having significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with Section 11340), Part 1, Division 3, Title 2 of the Government Code; and

WHEREAS, the Board finds that:

The amendments to the Agricultural Burning Guidelines and Meteorological Criteria for the Sacramento Valley Air Basin set forth in Attachment A provide for a system of daily variable acreage allocations and prorations among the districts in the basin which will be more closely matched to meteorological conditions and the probable effect of burning on air quality within the basin;

This system is likely to improve the air quality in the basin and reduce the incidence of smoke intrusions into urban areas;

This system is likely to increase the number of days on which some agricultural burning is permitted in the air basin and therefore is likely to provide more flexibility to local control personnel and farmers to schedule agricultural burning;

This system is likely to result in increased burning efficiency for farmers on days when it is not too wet to burn; and

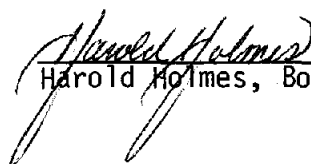
The amendments set forth in Attachment A will have no significant adverse environmental impacts.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to Title 17, California Administrative Code, Sections 80150, 80250, and 80320 set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt the amendments set forth in Attachment A after making them available to the public for a period of 15 days, provided, however, that the Executive Officer shall consider such written comments as may be submitted during this period, and shall present the regulations to the Board for further consideration if he determines that this is warranted in light of the written comments received.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the air pollution control districts in the Sacramento Valley Air Basin and the agricultural community to assist the districts in securing continued funding for administration of the Sacramento Valley Air Basin agricultural burning program.

I certify that the above is a true and correct copy of Resolution 83-7, as adopted by the Air Resources Board.

  
Harold Holmes, Board Secretary

80150. Open Burning in Agricultural Operations in the Growing of Crops or Raising of Fowl or Animals. (a) A district with no agricultural operations in the growing of crops or raising of fowl or animals within its jurisdiction may request to be exempted from the requirements of this section.

(b) Where an implementation plan for open burning in agricultural operations in the growing of crops or raising of fowl or animals is required, the plan shall include rules and regulations which:

(1) Require the material to be burned to be free of material that is not produced in an agricultural operation.

(2) Require the material to be arranged so that it will burn with a minimum of smoke.

(3) Require material to be reasonably free of dirt, soil and visible surface moisture.

(4) Require the material to be dried for minimum periods to be specified in the implementation plan, with separate specifications for the following: (A) trees and large branches, (B) prunings and small branches, (C) wastes from field crops that are cut in a green condition, and (D) other materials.

(5) Regulate the total amount of material that may be burned each day.

(c) In developing the rules and regulations each district shall consider additional provisions with respect to the following:

(1) Hours of burning.

(2) No-burning season or seasons.

(3) Regulating burning when the wind direction is toward a nearby populated area.

(4) Limiting the ignition of fires to approved ignition devices.

(5) Permitting on no-burn days the burning of empty sacks or containers which contained pesticides or other toxic substances, providing the sacks or containers are within the definition of "open burning in agricultural operations in the growing of crops or raising of fowl or animals," as specified in Section 80100~~(g)~~(f)(2)(B).

(d) Districts within the boundaries of the Sacramento Valley Air Basin and that portion of Placer County (of the Mountain Counties Air Basin) below 1,500 feet msl, and districts within the boundaries of the San Joaquin Valley Air Basin, shall include in the plan rules and regulations which:

(1) Require all rice harvesting to employ a mechanical straw spreader to ensure even distribution of the straw with the following exception:

(A) Rice straw may be left in rows provided it meets drying time criteria prior to a burn as described in subdivision (d)(2) below.

(2) Require that after harvest

(A) No spread rice straw shall be burned prior to a three day drying period.

(B) No rowed rice straw shall be burned prior to a ten day drying period.

(C) Subdivisions (d)(2)(A) and (d)(2)(B) above do not apply if the rice straw makes an audible crackle when tested just prior to burning with the testing method described in subdivision (d)(2)(D) of these provisions.

(D) 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 insure 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.

(E) After a rain exceeding 0.15 inch (fifteen hundredths of an inch), notwithstanding subdivisions (d)(2)(A) and (B) above, rice straw shall not be burned unless the straw makes an audible crackle when tested just prior to burning with the testing method described in subdivision (d)(2)(D), above.

(3) Require rice, barley, oat and wheat straw to be ignited only by stripfiring into-the-wind or by backfiring except under a special permit of the district issued 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.

(4) Require burning hours to be set so that no field crop burning shall commence before 10:00 a.m. nor after 5:00 p.m. of any day.

~~(e)--In-addition-to-the-regulations-required-in-subdivision-(d),-above, districts-within-the-boundaries-of-the-Sacramento-Valley-Air-Basin-shall also-include-in-the-plan-rules-and-regulations-which:~~

~~(1)--Require-that-during-the-critical-period-from-October-1-through November-15-of-each-year,-the-daily-acreage,-on-permissive-burn-days,-of open-burning-in-agricultural-operations-in-the-growing-of-crops-or-raising of-fowl-or-animals-within-the-basin-shall-be-no-more-than-that-amount-which would-result-in-particulate-emissions-of-335-tons-per-day.--For-the-purpose of-evaluating-emissions-pursuant-to-this-section,-the-emission-factors included-in-Attachment-A-(Section-80155)-shall-be-used.--The-authority-for determining-how-the-acreage-will-be-allotted-to-each-crop-waste-and-to-each district-shall-rest-with-the-Sacramento-Valley-Basinwide-Control-Council, provided-that-the-Council-may-not-allocate-to-any-district-an-amount-of acreage-which-would-result-in-total-particulate-emissions-in-excess-of-335 tons-per-day-Basinwide-if-each-district-within-the-Basin-were-permitted-to~~

~~burn. The crop and district allocations prepared by the Basinwide Control Council shall be submitted to the Chief of the Air Resources Board Enforcement Branch by September 15 of each year.~~

(e) The Sacramento Valley Basinwide Air Pollution Control Council shall submit an Agricultural Burning Plan for the 12-month period commencing September 1 to the state board by July 1 of each year for the state board's review and approval. The Agricultural Burning Plan shall be developed in cooperation with state board staff. It shall be applicable to all areas of the Sacramento Valley Air Basin below 3,000 feet msl, and to that portion of Placer County (in the Mountain Counties Air Basin) below 1,500 feet msl. It shall contain:

(1) A daily basinwide acreage allocation equation which includes a basinwide meteorological factor (B.M.F. - determined from Tables 4, 5, and 6 of Section 80320) and a basinwide air quality factor (B.A.Q.F. - basinwide 24-hour average soiling index at decision time);

(2) Procedures for distributing acreage allocations to each district, the total of which shall not exceed the basinwide acreage allocation determined by the state board from the daily basinwide acreage allocation equation;

(3) The hours to be permitted for burning;

(4) a description of the meteorological and air quality monitoring networks to be used to provide data for determining the basinwide meteorological and air quality factors; and

(5) Other clarifying details mutually agreed upon by the Basinwide Council and the state board.

The executive officer of the state board shall approve the plan if s/he determines it meets the requirements of this subdivision (e) and contains a basinwide acreage allocation equation that, when applied, is not likely to permit emissions from agricultural burning which cause or contribute to a violation of the state ambient air quality standard for suspended particulate matter or a significant deterioration of existing air quality. The approved Agricultural Burning Plan shall remain in effect until the executive officer approves a new plan.

(f) In addition to the regulations required in subdivision (d) above, districts within the boundaries of the Sacramento Valley Air Basin and that portion of Placer County (of the Mountain Counties Air Basin) below 1,500 feet msl shall also include in the plan rules and regulations which, for all areas below 3,000 feet msl:

(1) Require that the daily acreage, on permissive-burn days, of open burning in agricultural operations in the growing of crops or raising of fowl or animals within the district shall be no more than that acreage determined by the state board from the daily basinwide acreage allocation equation contained in the approved Agricultural Burning Plan required by subdivision (e) above and distributed to the district in accordance with the approved Agricultural Burning Plan. The allocation determined by the state board shall be in rice acre equivalents. The factors given in Attachment A (Section 80155) shall be used to convert other crop wastes to equivalent rice acre allocations.

(2) Require that no crop acreage which was harvested prior to September 10 shall be allowed to be burned during the period October 1 through November 15 of each year, unless written authority is given by the district.



In granting such written authority the district shall:

(A) Ensure the amount of acreage which is to be burned shall be included in the district's allotment specified in (1) above.

(B) Require a specific explanation of the cultural practices which require immediate burning.

(C) Require the person to specify the reason why burning was not conducted prior to October 1.

(D) Require the exception to be valid only on permissive-burn days.

NOTE: Authority cited: Sections 39600, 39601, 41856, and 41859, Health and Safety Code. Reference: Sections 41856, 41857, 41858, 41859, and 41863, Health and Safety Code.

80250. Sacramento Valley Air Basin and the Portion of Placer County below 1,500 Feet msl. (a) Above 3,000 feet msl\*, a permissive-burn day will be declared when the following criteria are met:

(1) Near 4:00 a.m., the mean 500 mb height over the Basin is less than the limiting mean height given in Table 1 of Section 80320.

(2) The expected 4:00 p.m. mean 500 mb height over the Basin is less than the limiting mean height given in Table 1 of Section 80320.

~~(b) -- Below 3,000 feet msl\*, in the counties of Shasta, Tehama, Butte, and Glenn (North Section of Basin), a permissive-burn day will be declared when at least 3 of the following criteria are met:~~

~~(1) -- Near the time of day when the surface temperature is at a minimum, the temperature at 3,000 feet above the surface is not warmer than the surface temperature by more than 8 degrees Fahrenheit.~~

---

\* In place of the standard 3,000 feet msl level, the elevation may be specified in increments of 500 feet on a day-to-day basis as determined from vertical temperature soundings.

{2}--The-expected-daytime-temperature-at-3,000-feet-above-the surface-is-colder-than-the-expected-surface-temperature-by-at-least-11 degrees-Fahrenheit-for-4-hours.

{3}--The-expected-daytime-wind-speed-at-3,000-feet-above-the surface-is-at-least-5-miles-per-hour.

{4}--The-expected-daytime-wind-direction-in-the-mixing-layer-has-a component-from-the-south.

{c}--Below-3,000-feet-msl\*,--in-the-counties-of-Colusa,-Yolo,-and-Solano (Southwest-Section-of-Basin),--a-permissive-burn-day-will-be-declared-when-at least-3-of-the-following-criteria-are-met:

{1}--Near-the-time-of-day-when-the-surface-temperature-is-at-a minimum,-the-temperature-at-3,000-feet-above-the-surface-is-not-warmer-than the-surface-temperature-by-more-than-13-degrees-Fahrenheit.

{2}--The-expected-temperature-at-3,000-feet-above-the-surface-is colder-than-the-expected-surface-temperature-by-at-least-11-degrees Fahrenheit-for-4-hours.

{3}--The-expected-daytime-wind-speed-at-3,000-feet-above-the surface-is-at-least-5-miles-per-hour.

{4}--The-expected-daytime-wind-direction-in-the-mixing-layer-has-a component-from-the-south-or-from-the-east.

{d}--Below-3,000-feet-msl\*,--in-the-counties-of-Sacramento,-Sutter,-and Yuba-(Southeast-Section-of-Basin),--and-that-portion-of-Placer-County-(of-the Mountain-Counties-Air-Basin)-below-1,500-feet-msl,-a-permissive-burn-day will-be-declared-when-at-least-3-of-the-following-criteria-are-met:

{1}--Near-the-time-of-day-when-the-surface-temperature-is-at-a

-----  
\*-Ibid

minimum, the temperature at 3,000 feet above the surface is not warmer than the surface temperature by more than 13 degrees Fahrenheit.

(2) -- The expected temperature at 3,000 feet above the surface is colder than the expected surface temperature by at least 11 degrees Fahrenheit for 4 hours.

(3) -- The expected daytime wind speed at 3,000 feet above the surface is at least 5 miles per hour.

(4) -- The expected daytime wind direction in the mixing layer has a component from the south.

(b) Below 3,000 feet msl\*, in all counties of the Basin and that portion of Placer County (of the Mountain Counties Air Basin) below 1,500 feet msl, a permissive-burn day will be declared when the daily basinwide acreage allocation is greater than zero acreage. This allocation shall be determined daily by the state board and will vary with the existing and projected meteorology and air quality. The basinwide allocation shall be calculated from the basinwide acreage allocation equation contained in the approved Agricultural Burning Plan required in Section 80150(e).

(e)(c) Special situations in the Basin are:

(1) Burning control notices for certain specific burning operations may be issued up to 48 hours in advance. In such a case, the criteria used will be a modification of the above criteria so as to give consideration to the

---

\* Ibid

specific site and its location relative to populous areas, the stated amount of material to be burned, and the expected impact that the burn will have on air quality.

~~{2}--Except-for-the-period-October-1-through-November-15-of each-year,-a-premium-permissive-burn-day-will-be-declared-when-the conditions-for-a-permissive-burn-day-above-are-met-and-near-the-time-of-day when-the-surface-temperature-is-at-a-minimum,-the-temperature-at-3,000-feet above-the-surface-is-not-warmer-than-the-surface-temperature-by-more-than-5 degrees-Fahrenheit.~~

~~{3}~~ (2) If, when a no-burn day decision is declared, the federal ambient air quality standard for ozone, carbon monoxide, hydrocarbons, total suspended particulate, or state visibility standard is expected to be exceeded during the valid period, a note to this effect will be appended to the announcement.

~~{4}~~ (3) A permissive-burn or no-burn day decision that has been announced may be changed by the Air Resources Board at any time prior to 10:00 a.m. if the meteorological and air quality situation that actually unfolds so warrants it.

NOTE: Authority cited: Sections 39600, 39601, 41856, and 41859, Health and Safety Code. Reference: Sections 41854, 41855, 41856, 41857, 41859, and 41863, Health and Safety Code.

80320. Tables Referred to in Article 3.

Limiting mean 500-millibar heights\*, by month

	Table 1	Table 2	Table 3
January	5710*	5750*	5630*
February	5710	5740	5620
March	5710	5740	5630
April	5720	5760	5660
May	5770	5800	5710
June	5820	5850	5780
July	5850	5880	5830
August	5870	5890	5840
September	5850	5870	5810
October	5820	5850	5760
November	5770	5810	5700
December	5730	5780	5650

\* All heights in meters.

Agricultural Burn Meteorological Factors  
(Sacramento Valley Air Basin)

Table 4		Table 5		Table 6	
A.M. STABILITY		P.M. STABILITY		WIND SPEED	
°F	M.F.	°F	M.F.	MPH	M.F.
≥17	0.0	≥(-8)	0.0	0 to 2	0.0
15 or 16	0.1	-9	0.1	3	0.1
13 or 14	0.2	-10	0.2	4	0.2
11 or 12	0.3	-11	0.3	5	0.3
9 or 10	0.4	-12	0.4	6	0.4
7 or 8	0.5	-13	0.5	7	0.5
5 or 6	0.6	-14	0.6	8	0.6
3 or 4	0.7	-15	0.7	9	0.7
1 or 2	0.8	-16	0.8	10	0.8
0 or (-1)	0.9	-17	0.9	11	0.9
≤(-2)	1.0	≤(-18)	1.0	≤12	1.0

The basinwide meteorological factor (B.M.F.) is equal to the arithmetic mean of the meteorological factors (M.F.) from Tables 4, 5, and 6.

A.M. Stability: 3,000-foot temperature (a.m.) (°F) minus surface minimum temperature (°F).

P.M. Stability: 3,000-foot temperature (p.m.) (°F) minus adjusted surface maximum temperature\* (°F).

Wind Speed: Surface to 3,000 feet average wind speed (mph).

\* Maximum surface temperature minus 3°F which represents the surface temperature that will be equalled or exceeded for at least four hours.

NOTE: Authority cited: Sections 39600, 39601, 41856, and 41859, Health and Safety Code. Reference: Sections 41854, 41855, 41856, 41857, 41859, and 41863, Health and Safety Code.

State of California  
AIR RESOURCES BOARD

Addendum to Resolution 83-7

May 26, 1983

Agenda Item No.: 83-6-1

As directed by the Air Resources Board at its public hearing on May 26, 1983, the following language is added to Resolution 83-7.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the air pollution control districts in the Sacramento Valley Air Basin and the agricultural community to assist the districts in securing continued funding for administration of the Sacramento Valley Air Basin agricultural burning program.

The attached resolution replaces the earlier version in which this language was omitted.

State of California  
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Revisions to the Agricultural Burning Guidelines and the Meteorological Criteria for Regulating Agricultural Burning Contained in Title 17, California Administrative Code, Sections 80150, 80250, and 80320

Agenda Item No.: 83-6-1

Public Hearing Date: May 26, 1983

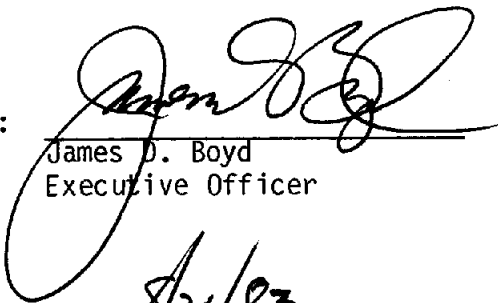
Response Date: July 29, 1983

Issuing Authority: Executive Officer

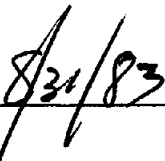
Comment: No comments were received identifying any significant environmental issues pertaining to this item. The staff report also identified no adverse environmental issues.

Response: N/A

CERTIFIED:

  
James D. Boyd  
Executive Officer

Date:

  
8/31/83

RECEIVED BY  
Office of the Secretary

DEC 06 1983

Resources Agency of California

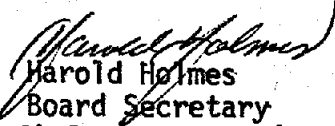


# Memorandum

To : Gordon Van Vleck  
Secretary  
Resources Agency

Date : December 7, 1983

Subject: Filing of Notice of  
Decisions of the Air  
Resources Board

  
Harold Holmes  
Board Secretary

From : Air Resources Board

Pursuant to Title 17, Section 60007 (b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.

## ATTACHMENTS

Resolution 83-3  
Resolution 83-7  
Resolution 83-8

RECEIVED BY  
Office of the Secretary

DEC 06 1983

Resources Agency of California