



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT

Policy & Procedures

Open Burning
Regulation 5

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Approved by:

A handwritten signature in black ink that reads "Jeff Gove". The signature is written in a cursive, flowing style.

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Introduction

The following inspection guidelines are designed to ensure complete and accurate open burning investigations by District staff and to provide compliance assistance to local and regional fire officials and regulated industry in the Bay Area. In addition, they are intended to increase fire officials understanding and knowledge of District open burning requirements and policies, and to enhance the cooperation between fire officials and the District.

Authority and References

Regulation 5 generally prohibits open burning in the District with exceptions that conditionally allow fires on certain days during predetermined burn periods. The allowable fire types are primarily agricultural burns; however, the regulation also provides for several types of non-agricultural burning activities.

Applicability

Regulation 5 applies to any fire occurring outdoors in the open air including the use of air curtain burners, incinerators or destructors. An air curtain burner or incinerator operates by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs.

General Guidelines

The inspection of an open burn for compliance with Regulation 5 will focus on identification of the responsible party, determination of fire type, whether or not the burn is an allowable fire, and the applicable requirements for each allowable fire (e.g., burn hours, permissive burn period, public official authorization, fuel moisture, burn acreage limitations, burn day status, etc.).

Additionally, the inspector will ensure compliance with any notification, fee payment and record keeping requirements, and petition or smoke management plan submittal provisions.

Open burning inspections can be done as part of a complaint investigation, in response to a notification or plan submittal, or when an inspector initiates an investigation of an unknown or suspected source of smoke observed in the field.

Determinization of Allowable Fire Type

One of the primary objectives of any open burning investigation is to determine whether or not the fire is allowed under District Regulation 5. This requires the inspector to first verify the type of fire (or the real purpose of the fire) being investigated.

1. The inspector should contact the person responsible for the fire and proceed with a line of questioning to make a determination about the material being burned or that was burned. For example, ask the person to describe what the material is, how the material is generated (from what type of operation), what they intend to accomplish by burning the material, where the material is grown or originated, and the specific land uses associated with the material.
2. The inspector should then inspect the burn site, write down all observations related to the fire, and take photographs of the burn piles and/or active fires. Be sure to note the location of the fire, the appearance of the material burned, the number and size of any burn piles, whether or not the fire is actively burning or smoldering, and the presence of recognizable burned debris in the ashes.

3. Once the fire type is verified, the inspector should determine the type of fire allowed in Regulation 5 by cross-referencing the information and facts gathered during the investigation with the allowable fire types specified in Section 401 and the exemptions in Section 110.
4. The inspector should contact his/her supervisor, the acting burn coordinator or the assigned Air Quality Specialist if any questions about the fire type need to be clarified.

Checking for Burn Authorization

The inspector should determine if the appropriate public official has authorized the fire by talking to the person who is responsible for the burn. Note that this determination can only be made when the public official is involved with approving or authorizing a burn. In some areas during the rainy (or non-fire) season, the local fire agency may not require a burner to get the agency's authorization to burn. In these cases, the District also does not require the local fire agency's authorization. (see Burn Authorization below)

1. When a written burn permit has been issued, the inspector should ask to review the document and verify that it is valid, accurate, and complete. Remember that the public official having jurisdiction, usually a public fire agency official, must allow each allowable fire type.
2. When the responsible person claims that he obtained verbal authorization to conduct the burn, the inspector should note the name of the public official who allegedly approved the fire. The inspector should then visit the public agency in question to confirm the authorization if it is necessary to verify compliance or document a violation.

Determination of "Gainful Occupation"

During an agricultural burning investigation, the inspector should determine whether the purpose of the fire is to initiate, continue or maintain an agricultural operation as a gainful occupation. This means that the person conducting the burn must be able to demonstrate proof of gross profit or loss from the agricultural operation (as evidenced by tax receipts, sales slips, property lease agreements or other such documents) to the satisfaction of the inspector. Agricultural programs conducted by public educational institutions or non-profit organizations do not need to establish gainful occupation.

1. During the investigation of all agricultural fires, the inspector should request (verbally or in writing) of the person conducting the burn, proof of gross profit or loss from the agricultural operation. If such documentation is not readily available, then set up a subsequent meeting for reviewing it.
2. When a person donates products he/she has grown to food banks, churches, etc., and claims the donation(s) as a tax deduction in their income tax returns, the operation does not qualify as a gainful occupation because this type of tax documentation is not considered evidence of gross profit or loss. The burning of agricultural waste generated from this type of operation is therefore not allowed.

Complaint Investigations

Both legal and illegal open burning activities may result in complaints about smoke and odors. These complaints should be handled, as described in the Complaint Guidelines of the District Compliance & Enforcement Division's Policies and Procedures Manual, except that the alleged source is an outdoor fire.

Investigating Fire Agency "Run" Reports

A "Run" Report is written by a fire agency to document their response to an incident such as an accidental fire, traffic accident or illegal fire. These reports are important documents because they provide District staff the investigative facts regarding open burning investigations and violations. Once a fire agency notifies the District

of the previous occurrence of an illegal outdoor burn, the message should be dispatched to the area inspector for follow-up. "Run" Reports are available upon request (and sometimes after paying a fee) at the administrative offices of the fire agency that responded to the incident.

1. The inspector should first visit the fire agency that responded to the alleged burn and obtain a copy of the "Run" Report. After reviewing the document, the inspector should ask the fire official to clarify any information about the incident and record the official's name and for photographs if none are in the Run Report.
2. After the burn investigation, the "Run" Report should be attached to the inspector's inspection report or Notice of Violation (NOV) report package for documentation.

Exemptions

Unconditional exemptions are outlined in Regulation 5, Sections 110.1 through 110.4. Fires set under these provisions are exempt from Regulation 5. However, these fires are not exempt from a public nuisance violation pursuant to Regulation 1, Section 301, or from Section 41700 of California Health & Safety Code. The most frequently used exemptions are:

- Fires set only for cooking of food for human beings, (5-110.1).
- Fires burning as safety flares or the combustion of waste gases (5-110.2).

Accidental fires such as grass or brush fires that may result from these two types of flares may be considered violations.

- Fires set for the purposes of fire training using one gallon or less of flammable liquid per fire (5-110.4).

The intent of this exemption is to allow a company or fire department to use more than one gallon of flammable liquid per day but no more than one gallon per individual fire or burning event; for example, to train in the use of a fire extinguisher to suppress car engine fires.

Conditional Exemptions

Any "Allowable" fire listed in Regulation 5, Section 401 shall be conducted in compliance with all the conditions in Section 111, unless any condition is specifically excepted or further restricted for a specific allowable fire type. Section 111 conditions are listed below:

Burn Start - Subsection 111.1

No burning shall take place before 10:00 a.m. local time on any day. Exceptions to this condition are for:

- Hazardous Materials (401.6) – may start burn at 9:30 a.m.;
- Fire Training (401.7) – may start burn before 10:00 a.m. if APCO notified in writing by mail or by fax at least seven (7) calendar days in advance;
- Range Management (401.11) – may start burn before 10:00 a.m. if determined necessary in the public interest by State Director of Forestry or fire official having jurisdiction;
- Forest Management (401.12) – may start burn before 10:00 a.m. if deemed necessary in the public interest by the fire official having jurisdiction.

- Any Wildland Vegetation Management fire (prescribed burn) with an APCO-approved smoke management plan. The start time of a prescribed burn is dictated by whether or not the burner receives an acreage burning allocation from the District and when the meteorological prescription for the burn project is satisfied.

Burn Termination - Subsection 111.2

No additional materials or fuel shall be ignited, nor shall any material or fuels be added to any fire after two hours before sunset.

This condition prohibits a person from lighting any allowable open fire, adding any material or fuel to an existing fire, and allowing an existing fire to burn additional material (e.g., tules, stubble, orchard prunings, etc.) after two hours before sunset. For example, a stubble fire should not be set after 3:30 p.m. when the sunset that day is 5:30 p.m. Similarly, an existing stubble fire must not be allowed to burn additional fuel after 3:30 p.m. This means that the person responsible for the fire should either extinguish the burn or disk a firebreak in the field to prevent the fire from spreading to additional fuel no later than 3:30 p.m.

Exceptions to this condition are for:

- Fire Training (401.7) – may conclude burn after two hours before sunset if APCO notified in writing or by fax by mail at least seven (7) calendar days in advance.
- Marsh Management (401.13) – cannot burn after 3:00 p.m.

Wind Velocity - Subsection 111.3

No material or fuel shall be ignited, nor shall any material or fuel be added to any fire when the wind velocity is less than five (5) miles per hour except for crossfiring (a stubble burn ignition technique), or when the wind direction at the site shall be such that the direction of smoke drift is toward a populated area in order to minimize local nuisances caused by smoke and particulate fallouts.

On days where wind velocity is expected to be very high, the burner should check with the local fire department for any safety restrictions.

Minimum Drying Period - Subsection 111.4

Prior to ignition, all piled material shall have dried for a minimum of 60 days. This condition does not require the material to be piled for 60 days prior to burning. Also, material dead for 60 days is considered reasonably dry enough to satisfy this condition. The piles must be managed to ensure that burning the material does not produce smoke after sunset on any day.

An exception to this condition is for:

Orchard Pruning and Attrition (401.3) – May have the following minimum drying times apply when pruning is performed between February 15 and April 30 for integrated pest management purposes.

Trees and branches over six (6) inches in diameter;	30 days
Grape vines and branches less than or equal to six (6) inches in diameter	15 days

Note: In order to avoid times of highest disease occurrence or potential to spread, some pruning activity is delayed until late in the dormant season to promote rapid healing of wounds and avoid disease infections.

Free of Dirt - Subsection 111.5

All material to be burned shall be reasonably free of dirt or soil.

Size of Pile - Subsection 111.6

Piled material shall be limited to a base area not to exceed 25 yd² and the height shall be at least 2/3 of the average width of the pile. For circular piles the diameter should not exceed approximately 17.5 feet.

This condition limits the size of piled material to be burned. For example, if the base area dimensions of a burn pile are 5 yards wide and 5 yards long (i.e., do not exceed 25 yd²) then the average width of the pile is 5 yards and the pile height must be at least $(2/3) \times (5 \text{ yards}) = 3.3 \text{ yards}$ or about 10 feet.

Exceptions to this condition are for:

- Range Management (401.11) – Pile size may be waived by the State Director of Forestry or fire official having jurisdiction when determined necessary in the public interest.
- Forest Management (401.12) – Pile size may be waived by the fire official having jurisdiction when deemed necessary in the public interest.

Ignition Material - Subsection 111.7

Ignition material shall be limited to those listed by the State Director of Forestry, as follows: orchard torches; drip torches; pressurized diesel torches; propane or LPG torches; commercial petroleum gel materials; pressurized or solid (napalm or blivets); commercial safety fuse; commercial type ignition grenades, e.g. Fenner, etc; fuse; commercial fuse lighters and matches. All fires shall be ignited so as to burn as rapidly as possible within conditions of safety and minimum pollution.

Site of Ignition – Subsection 111.8

Ignition shall be initiated at or near the top of the piled material. No additional material, except ignition material, shall be added to the fire.

Tonnage Burned – Subsection 111.9

Tonnage, volume or acreage of material burned on any given day and/or at any specified site is subject to limitations set by the APCO but may not exceed any limits set by the ARB.

Limited Exemption

A fire set for recreational purposes using only clean dry wood or charcoal, and a small amount of fire starter is exempt from the requirements of Section 301 (5-112).

This subsection refers to campfires, bonfires, ceremonial fires (i.e., official retirement of a United States flag by burning and native American or other religious ceremonies), or fires conducted as part of an unusual event such as fire walking.

Hand warming fires are allowed within the recreational fire provision provided the fire is in a well perforated metal container, only clean dry wood is used, and the fire is exclusively for this use.

Outdoor fires to cure pottery (such as "Raku firings" or pit firings) are also allowed within the recreational fire provision provided only clean dry wood and fire starter is used, the fire is exclusively for this use, and the activity is not part of a business for gainful occupation.

Note: The recreational fires described above are prohibited during a Mandatory Burn Ban (a.k.a., Winter Spare the Air Alert) announced by the District.

Burn Authorization

The District does not issue or require open burning permits for fires allowed by Regulation 5. However, all fires subject to Regulation 5 must be set or allowed by a public official having jurisdiction. "Allowed by a public official" means that the person responsible for the proposed burn must obtain a written burn permit or verbal approval from an officer of an authorized public agency prior to the burn. However, in some areas or during the rainy (or non-fire) season, the local fire agency may not require a burner to get the agency's authorization to burn. In these cases, the District also does not require the local fire agency's authorization.

Most local fire officials typically have the authority to approve burn permits in their jurisdiction. However, other local, state, and federal officers such as the California Department of Fish and Wildlife, County Agricultural Commissioner, California Department of Forestry and Fire Protection (CAL FIRE), County Flood Control Districts, and the U.S. National Park Service are also authorized to grant permission for open burning.

Some fire agencies may issue or approve a burn permit for an extended period of time that corresponds to one or more specific burn seasons (permissive burn periods).

Standards

Regulation 5, Section 301 prohibits all fires within the District except as provided in the regulation. The exception includes the four fire types completely exempt from the regulation pursuant to Section 5-110 (see Exemptions) and the seventeen "Allowable fires" found in Section 5-401 (see Allowable Fires below).

In addition to fire type restrictions and conditions, the following time-based restrictions and conditions also apply:

Permissive Burn Day

Certain fires are allowed only by meeting the criteria set forth in the conditional exemptions of Section 5-111 and are additionally allowed only on a Permissive Burn Day, also known as a Burn Day. The District designates each day of the year as either a Burn or No-Burn Day, based on meteorological standards established by the California Air Resources Board. These standards include requirements for expected daytime wind velocity, temperature, and atmospheric stability. Burn Days will be declared only if favorable weather conditions will minimize pollution caused by open burning. The number to call to find out whether it's a permissive Burn Day or No-Burn Day is (800) 792-0787. This is a recorded message that is available 24-hours/day. Each day after 3:00 p.m., the message provides the Burn Day status for the next day. The Burn Day status is posted on the Open Burn Status webpage at <http://www.baaqmd.gov/permits/open-burn>.

Permissive Burn Period (Season)

In addition to restrictions regarding permissive Burn Days, the following allowable fire types are also limited to pre-established months, as set forth in the designated subsection:

- Crop Replacement (401.2) – October 1 through April 30*
- Orchard Pruning and Attrition (401.3) – November 1 through April 30*
- Double Cropping Stubble (401.4) – June 1 through August 31
- Stubble (401.5) – September 1 through December 31
- Flood Debris (401.8) – October 1 through May 31
- Range Management (401.11) – July 1 through April 30
- Forest Management (401.12) – November 1 through April 30
- Marsh Management (401.13):
 - Spring burning period – March 1 through April 15
 - Fall burning period – September 1 through October 15

Note: *These permissive burn periods may be extended due to excessive rainfall upon approval of the APCO. See each subsection for extension applicability.

The other allowable fire types do not have seasonal restrictions and may be burned pursuant to the burn day and applicable requirements.

Violations

Any violations of Regulation 5, including standards and/or administrative requirements shall be noticed on a Notice of Violation (NOV) as a violation of **Regulation 5, Section 301**. The NOV report shall describe in detail the section(s) or subsection(s) violated. Below are some common violations:

1. **Regulation 5, Subsection 301.1** is violated when a person conducts a fire within the District that does not qualify as an exempt fire or an allowable fire type (see Sections Exemptions and Conditional Exemptions above). This includes illegal fires (i.e., when garbage, trash, paper, leaves, backyard prunings or other material is found burning or is burned as part of an allowable fire).
2. **Regulation 5, Subsection 301.2** is violated when open burning including illegal fires, occurs within the District on a No-Burn Day, as designated by the APCO (see Permissive Burn Day above), or when burning is in excess of any acreage burning allocation or limitation (see Allowable Fires below).
3. **Regulation 5, Subsection 301.3** is violated when any condition of an allowable fire (e.g. burn hours, permissive burn period, pile size, drying time, etc.), any requirement of smoke management plan approved by the APCO, or any special condition or any **administrative requirement** in Regulation 5, is not satisfied.

Allowable Fires

Allowable Fires (5-401) - Each fire type listed below must be set or allowed by the public official having jurisdiction, such as local, state, or federal officers. In addition to meeting any requirements listed for a specific type of allowable fire, the following also apply:

- Conditions in Section 5-111 must be met;
- Burning is limited to a Permissive Burn Day, unless specifically approved by the APCO in writing pursuant to Subsection 401.16 (Filmmaking) or 401.17 (Public Exhibition), or to Subsection 401.7 (Fire Training) if the APCO is notified at least two weeks prior to a burn.
- Prior notification or a Smoke Management Plan must be submitted, as applicable.

Also note, the allowable fire types are primarily agricultural burns; however, the regulation also provides for several types of non-agricultural burning activities. Agricultural burns are fires for the purpose of initiating, continuing or maintaining agriculture as a gainful occupation. Fuels are limited to materials grown on the site and do not include feed or fertilizer containers, finished lumber, plastic or rubber products, plumage, hides, fur, offal or fecal material or refuse from plant or animal processing.

Disease and Pest (5-401.1)

These agricultural fires must be set or allowed only by the county Agricultural Commissioner in the performance of official duty. Material burned under this provision must be from land that will remain in agricultural use as a gainful occupation for at least a year after burning, as certified by the burn applicant (This land use provision may be waived by the county Agricultural Commissioner pursuant to Section 403). This type of fire is allowed throughout the year.

1. These burns are primarily conducted to eradicate or prevent the spread of disease and pests in agricultural crops. In this context, a disease is a harmful condition caused by a primary agent (e.g., virus, bacterium, fungus, or parasite) that impairs the performance of a vital function of the plant; a pest is a plant or animal potentially harmful to an agricultural crop and sometimes is the causative agent of disease.

Typical animal pests affecting Bay Area crops are insects such as Phylloxera grapevine lice, twig borer moths, and bark beetles; prevalent plant pests are fungi (such as rust and mildew) and invasive weeds. Common diseases include Pierce's Disease and Fanleaf Virus (grapes), Brown Rot (apricots, peaches), Blackline (walnuts), Fire Blight (apples, pears), Almond Scorch, and Gall Rust (Christmas trees).

2. District-approved disease and pest burn permit application forms should be available at each county Agricultural Commissioner's office (see Exhibit 1). These forms serve to document the agricultural land use certification required in Section 5-403 and the Commissioner's burn authorization. Burners should be able to provide completed forms to District staff upon request.

Note: Clean, wooden grape stakes may be burned as part of a vineyard disease and pest fire; however, pressure or chemically (chromium, arsenic, or copper) treated wooden grape stakes, end posts and anchor posts shall not be burned.

Crop Replacement (5-401.2)

These agricultural fires must be set or allowed by a public fire official having jurisdiction and must be necessary for crop replacement to proceed. The permissive burn period is October 1 through April 30; however, it may be extended by the APCO to no later than June 30 when wet weather has prevented such burning.

These fires are conducted for the purpose of establishing an agricultural crop in a location, which formally contained another type of crop or natural growth. Examples of this fire type include the replacement of un-saleable trees at a Christmas tree farm, the replacement of a fruit orchard operation with row crops, the clearing of natural vegetation in order to establish a vineyard, and the replacement of one variety of a crop with another variety of the same.

Note: Clean, wooden grape stakes may be burned as part of a vineyard crop replacement fire; however, pressure or chemically (chromium, arsenic, or copper) treated wooden grape stakes, end posts and anchor posts may not be burned.

A Crop Replacement fire for the purpose of establishing an agricultural crop on previously uncultivated land that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land is regulated as a Wildland Vegetation Management fire. This type of fire is subject to all applicable prescribed burning requirements in Section 5-401.15 (see Wildland Vegetation Management below).

Orchard Pruning and Attrition (5-401.3)

These agricultural fires must be set or allowed by a public fire official having jurisdiction. The fires must be necessary to maintain and continue the growing of fruit trees, vineyards, and cane fruits as a gainful occupation. The permissive burn period is November 1 through April 30; however, it may be extended by the APCO to no later than June 30 when wet weather has prevented such burning.

These fires are conducted to dispose of periodic prunings and attrition losses from fruit trees (peach, apple, apricot, cherry, etc.), nut trees (almonds, walnuts, etc.), vineyards, and cane fruits (boysenberry, raspberry, blackberry, etc.). Attrition losses refer to the removal of dying crops approaching, or dead crops that have reached the end of their plant life cycle. Other material that may be burned includes the cuttings/prunings of brush from the perimeter of a vineyard or orchard that encroach on crops or unwanted vegetation (brush, weeds, poison oak, etc.) from within a vineyard or orchard.

Double Cropping Stubble (5-401.4)

These agricultural fires must be set or allowed by a public fire official having jurisdiction and must be necessary to remove the grain stubble and straw before a field vegetable crop is planted. The permissive burn period is June 1 through August 31.

1. These fires are conducted to dispose of grain stubble from agricultural land from which both grain and vegetable crops are harvested during the same calendar year. In this type of operation, grains (primarily oats, wheat and hay) are dry farmed during the winter months and harvested in May or June. After burning the stubble and tilling the soil, vegetable crops like corn, beans, and tomatoes are grown and harvested during the summer months. The double cropping cycle is completed in the fall when the grain seed is sowed.
2. This type of burning is common in the Central Valley but not in the Bay Area. It does occur in the Brentwood area of east Contra Costa County.
3. To minimize smoke generation the material to be burned must not have visible surface moisture.

Stubble (5-401.5)

These agricultural fires must be set or allowed by a public fire official having jurisdiction and must be necessary to maintain and continue the growing of field crops as a gainful occupation. The permissive burn period is September 1 through December 31.

1. These fires are conducted to dispose of stubble and straw. Stubble is the stalk, stem or trunk of a plant or cereal grass (primarily oats, wheat and hay) that remains attached to the soil after harvest. Most stubble ranges from 4 to 12 inches long. Straw is a by-product when the desired grain seed is separated mechanically from a harvested plant.

Stubble is burned in areas where soil decomposition is slower and, as a result, where it interferes with soil tillage prior to sowing the next crop. Burning also helps to control soil borne diseases.

2. Windrowed hay in a field of stubble that has been ruined by excessive moisture before being baled may be burned along with the stubble provided moisture content criteria described below is satisfied. However, ruined bales of hay in a stubble field cannot be burned.
3. When a question arises about the fuel moisture content of a stubble field, check each field for visible surface moisture or conduct random "Crackle" tests pursuant to Section 5-601 after at least 0.15 inches of rain. Rainfall totals are usually available at the local Farm Bureau or Soil Conservation District office. A field, or any portion thereof, with visible surface moisture or which does not pass the "Crackle" test should not be burned.
4. Appraisal of Field Crop Fuel Moisture (Section 5-601): The "Crackle" test includes the following sampling requirements and sample evaluation criteria:
 - a. The "Crackle" test should only be used to evaluate fuel moisture content after at least 0.15 inches of rainfall has been recorded in the immediate area where the field is located.
 - b. When wet material is burned without passing the "Crackle" Test and the same material previously failed the test, a violation notice may be issued.
5. If the opportunity exists, verify the technique used to ignite each field. Only backfiring, stripfiring, or crossfiring (or any combination of the three) are allowed unless an alternate technique is approved by the APCO verbally or in writing prior to ignition. (See Exhibit 5 for a schematic diagram of the techniques.)
6. Stubble burns are subject to daily burn acreage limitations. The applicable limitation depends on the geographical location of the burn within the District. The following limits apply:
 - a. Outside of Sonoma County, no more than 100 acres of a property per day shall be burned. A property is defined as a single parcel of real property or contiguous parcels under the same ownership. A day is from midnight to midnight.
 - b. Within Sonoma County, the District will coordinate an acreage burning allocation system with the following limitations:
 - i. No burning is allowed without first receiving an acreage burning allocation from the APCO.
 - ii. Burning is limited to 100 acres of a property per day and 500 acres per day countywide.
 - iii. Up to 200 acres of a property per day may be burned provided the 500-acre limitation has not been allocated by 12:00 noon, an additional allocation has been approved by the APCO, and no more than two fields on the same property are burned simultaneously.

The District will coordinate all Sonoma County requests for acreage burning allocations as follows:

All requests shall be made through the Acting Burn Coordinator by calling (415) 749-4600 between the hours of 9:30 a.m. until 2:00 p.m. for burning any day of the week, including holidays and weekends.

Stubble burners must receive an acreage burning allocation (i.e., allocated a specific burn acreage amount) before they can proceed with a burn. The burner cannot call in and leave burn acreage information as a phone message and then conduct the burn.

Note: When the daily 500-acre acreage limitation has not been completely allocated in Sonoma County, any subsequent stubble burn requests received that day shall be prioritized for the next permissive burn day in the order in which they are received.

Hazardous Material (5-401.6)

These fires must be set or allowed by a public fire official having jurisdiction for the purpose of the prevention or reduction of a fire hazard, including the disposal of dangerous materials. These fires are allowed throughout the year. These fires are also referred to as Hazard Reduction Fires, primarily as related to enforcement of **Section 4291 of the Public Resources Code (4291 PRC)**.

For reference, 4291 PRC requires any person that owns, leases, controls, operates or maintains buildings or structures in, upon, or adjoining any land area which is covered with flammable vegetation or other combustible growth, to clear and maintain firebreaks around such buildings and structures. Similar requirements are found in Appendix II-A of the Uniform Fire Code and county ordinances.

Note: 4291 PRC does not require the use of fire as a disposal method to comply with this public law.

1. **Fires Related to 4291 PRC (for vegetation near buildings):** These fires must, in the opinion of a public fire official, be necessary, and will be allowed provided all of the following conditions are satisfied:
 - a. **Only natural vegetation or other native growth may be burned.** No ornamental or landscape prunings are allowed.
 - b. **The amount of material to be burned shall be greater than five (5) cubic yards cleared annually from a single property.** This means that during a calendar year at least 5 yd³ of hazardous vegetation burned.
 - c. The minimum quantity applies to vegetative material cleared from a single parcel of real property or contiguous parcels under the same ownership. Material cleared from areas that are not associated with a firebreak or cleared during a prior calendar year must not be used to determine the quantity of material generated. "A prior calendar year" means the calendar year before the current year during which the fire is intended to be burned.
 - d. The material burned where it is grown without being moved to a different location on the property unless approved by the APCO. This means that if the material can be moved, then alternative disposal methods should be considered.
 - e. **The material cannot be abated by an economically, ecologically or logistically viable option.** The material is inaccessible for removal by vehicle and **available alternatives to burning such as shredding, chipping, composting, disking, plowing, or harrowing are not feasible.** This means that in the opinion of the fire official, these methods are not practical under the existing circumstances.
 - f. The material, if ignited accidentally, would result in a fire of such magnitude as to immediately threaten life or adjacent improved property or resources and require an excessive fire suppression effort. This means that in the judgment of the fire official, the material to be burned poses a fire hazard with the potential to cause a wildland fire, and that there exists an urgent need to reduce the risk of an accidental fire.

Note: A 4291 PRC burn applies to burning material cleared to maintain defensible space of 100 feet or more as required around a structure for a fire break, etc. and anything outside of the designation would be deemed as hazardous material for the purpose of this Regulation.

2. **Fires Not Related to 4291 PRC (for vegetation not near buildings):** These fires must, in the opinion of a public fire official, be necessary and the fire hazard must not be able to be abated by any other

means. (This means that such fires shall be allowed when, in the opinion of the fire official, fire is the most reasonable method of disposal under the existing circumstances).

Any Hazardous Material fire not related to 4291 PRC that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land is regulated as a Wildland Vegetation Management fire. This type of fire is subject to all applicable prescribed burning requirements in Section 5 401.15 (see Wildland Vegetation Management below).

3. **Where Fire Official Authorization is Unavailable:** In some areas, during certain times of the year, some fire officials, such as CAL FIRE, do not require a permit for hazard reduction fires. In areas where such fire official authorization is unavailable, all hazard reduction fires will be allowed without written fire official authorization, ***provided all the provisions found in Item 1a, b and e above are met.***

Note: The District will allow property owners to determine if they meet the criteria specified in 1e above, where no fire official authorization is available. Property owners are strongly encouraged to use alternatives to burning vegetation whenever possible to reduce potential public health and air quality impacts caused by smoke emissions from burning. These alternatives include shredding, chipping, composting or disking. Residential or “backyard” waste, garden trimmings, leaves, landscape (tree branches, plants and grass) debris or finished or treated wood, plastic, rubber or other refuse cannot be burned.

4. Empty, non-rinseable, non-reusable pesticide containers, including plastic-lined paper bags for sulfur, may also be burned as a Hazardous Material fire. The containers or bags should be burned onsite and on the same day of use or the next permissive burn day, and not stockpiled for burning. Appropriate precautions must be taken to minimize emissions from such burning and to avoid a public nuisance.

Fire Training (5-401.7)

1. These fires must be set or allowed by the public official having jurisdiction, and the training must be necessary in the official's opinion. This type of fire is allowed year-round.

These fires are conducted to instruct public or industrial employees, in firefighting methods. Examples of acceptable fuels used for training exercises include, but are not limited to, gasoline or diesel fuel in open burn pans (i.e., for fire extinguisher training), buildings or structures scheduled to be demolished, and natural vegetation such as annual grasses or standing brush. The burning of piled vegetation is not allowed as a fire training burn.

2. Structural fire training is not allowed as a means of complete building demolition. The intent of structural fire training is to allow the fire agency to set the fire and then abate it as if under actual conditions. The fire should only be re-ignited if necessary for further training.

As a result, a building or structure cannot be burned to near destruction before being extinguished during structural fire training. It is desirable that at least one wall is left standing and the floor is intact after a training exercise is completed.

However, Inspection staff should not assume that a fire agency is in violation of Regulation 5 for not satisfying this policy. Fire agencies may have legitimate safety concerns about having “at least one wall standing” after the training exercise is complete because of the risk of collapse posed to firefighters.

Each structural fire training exercise should be investigated on a case-by-case basis and staff should attempt to document all of the facts associated with any apparent non-compliance with this policy.

The use of any building or structure for fire training for demolition must satisfy the reporting requirements in District Regulation 11, Rule 2, Subsection 401.3 and the asbestos operation fee schedule in Regulation 3.

3. If fire training is conducted using natural vegetation such as brush or grass, the acreage to be burned should be limited so as to preclude a public nuisance.
4. A fire agency may conduct fire training for volunteer fire fighters or for seasonal fire fighters once per quarter calendar year on a permissive burn day. This type of training may also occur on a "No-Burn Day" provided the District is notified in writing by mail or facsimile of the training date at least two weeks in advance.

A fire agency may also conduct fire training for volunteer fire fighters or seasonal fire fighters along with regular duty firefighters or for a combination of volunteer, seasonal and regular duty fire fighters on a permissive burn day for as many times during a calendar year as deemed necessary by fire agencies involved.

A fire agency may also conduct fire training for volunteer fire fighters or seasonal fire fighters along with regular duty firefighters or for training a combination of volunteer, seasonal and regular duty fire fighters on a "No-Burn Day" once per quarter year provided the District is notified in writing by mail or facsimile of the training date at least two weeks in advance.

When an agency participates in another fire agency's training burn (multi-agency exercise) on a "No-Burn Day," then the participating agency also uses up its "once per quarter year" allowance to conduct fire training on a "No-Burn Day."

A volunteer firefighter is an unpaid employee of a fire agency. Fire academy recruits-in-training are paid employees and, as such, are considered regular duty firefighters. A seasonal firefighter is a temporary paid employee hired for a specific period of a year (e.g., summer). A Fire Protection District, Fire Department, and a CAL FIRE Ranger Unit are examples of a fire agency.

Flood Debris (5-401.8)

These fires must be set or allowed by the public fire official having jurisdiction and must be necessary to maintain or continue agriculture as a gainful occupation. The permissive burn period is October 1 through May 31.

These fires are conducted to remove natural wood (not lumber or treated wood) and vegetative debris deposited by floodwaters on land in agricultural use only. All trash, plastic, etc. should be removed prior to ignition.

Irrigation Ditches (5-401.9)

These agricultural fires must be set or allowed by the public fire official having jurisdiction, and the use of fire must be necessary in the official's opinion. This type of fire is allowed throughout the year.

These fires are conducted to control vegetative growth in irrigation ditches and canals. These artificial waterways are periodically cleared of material that interferes with water flow or drainage into irrigated land.

Flood Control (5-401.10)

These fires must be set or allowed by a public official in charge of flood control activities. The fire must, in the opinion of such an official, be a necessary incident to the maintenance and clearing of water courses and flood

control channels for the purpose of preventing or eliminating flood hazard. Unlike Flood Debris burns, this type of fire is allowed year-round and need not be associated with an agricultural operation.

1. These fires are conducted to dispose of material lying or growing in natural channels (rivers, creeks, streams, etc.) or flood control channels (debris basins, between levees or dikes).
2. The most common public agencies with the authority to allow this fire type include county flood control districts, and county water districts.

Range Management (5-401.11)

These fires must be set or allowed by a public fire official having jurisdiction, or the State Director of Forestry. The fire must also be necessary to maintain and continue the grazing of animals as a gainful occupation. The permissive burning period is July 1 through April 30.

1. These fires are conducted to remove unwanted vegetation from open lands (private or public) where animals such as horses, cattle, and sheep are allowed to graze or roam freely and feed.
2. Brush to be burned must be treated at least six months prior to a burn if determined to be technically feasible by the State Director of Forestry or public fire official. Feasibility shall be subject to APCO approval.

The term "treated brush" means that the material has been felled, crushed or uprooted with mechanical equipment, has been desiccated with herbicides, or is dead.

3. Trees over 6 inches in diameter must be felled and dried at least six months prior to a burn.
4. The morning burn hour and pile size conditions in Subsections 111.1 and 111.6 may be waived by the State Director of Forestry or a public fire official having jurisdiction when determined necessary in the public interest.
5. Any Range Management that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land is regulated as a Wildland Vegetation Management fire. This type of fire is subject to all applicable prescribed burning requirements in Section 5-401.15 (see Section 8.O. below).

Forest Management (5-401.12)

These fires must be set or allowed by the public fire official having jurisdiction, and the use of fire must be necessary in the official's opinion. The permissive burn period is November 1 through April 30.

1. These fires are conducted to remove forest debris and for forest management (This means that fires may be conducted as part of, or for forest management practices which include timber operations, silvicultural practices or forest protection practices). This fire type does not include those commercial operations known as Christmas tree farms. However, other legitimate fires may be authorized at Christmas tree farms, as appropriate, such as Disease and Pest or Crop Replacement fires.
2. The term "timber operations" means cutting or removal of timber or other forest vegetation. "Timber" generally refers to living trees suitable for some use. "Silviculture" means the establishment, development, care and reproduction of stands of timber.

3. A "forest" is defined in Section 5-221 as a vegetation type or plant community covering a tract of land, which is named and described as a series, habitat, or unique stand according to the California Native Plant Society (CNPS) classification system set forth in the most current edition of *A Manual of California Vegetation*, and dominated by trees growing more or less closely together. The dominant vegetation form must be described as a broadleaf deciduous, broadleaf evergreen, conifer, or mixed broadleaf-conifer forest. Forest does not include chaparral, scrub and grassland communities, or the eucalyptus series, as these vegetation types are described in the CNPS classification system.

The burden of whether a given fire qualifies as a Forest Management fire is on the person who conducts or authorizes the burn. This determination shall be based on the definition of forest above.

4. The morning burn hour and pile size conditions in Subsections 111.1 and 111.6 may be waived by the public fire official when determined necessary in the public interest.
5. All materials to be burned must be piled or windrowed unless deemed poor practice by the public fire official having jurisdiction.
6. Any Forest Management fire that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land is regulated as a Wildland Vegetation Management fire. This type of fire is subject to all applicable prescribed burning requirements in Section 5-401.15.

Marsh Management (5-401.13)

These fires (also known as tule or marsh burns) must be declared necessary by the California Department of Fish and Wildlife (DFW), previously known as the Department of Fish and Game. There are two permissive burn periods for this fire type: Spring from March 1 through April 15 and Fall from September 1 through October 15.

1. These fires are conducted for the improvement of marshland for wildlife habitat. Marshland is defined in Section 5-222 as a type of wetland ecosystem periodically or permanently inundated to a depth up to 2 meters (6.6 feet) that supports a cover of low or tall emergent vegetation. Habitats within these wetland areas include diked, seasonally managed wetlands, unmanaged tidal wetlands, open bays, sloughs, and associated upland grasslands. These habitats are primarily located in the Sacramento-San Joaquin estuary region of southwestern Solano County and southeastern Napa County (also called the west "Delta"). The region includes low-lying land areas and islands positioned in and around this waterway, and a variety of natural marshes and man-made wetlands partitioned by levees. Most burns occur in the Suisun Marsh on private property used by commercial hunting clubs or on public lands to manage wildlife resources in the area.

Note: The jurisdictional boundaries of the Suisun Resource Conservation District (SRCD) essentially encompass the Suisun Marsh area in southwestern Solano County.

2. No fires are allowed on a given piece of land more than once in any two-year period. In addition, DFW is required to provide the District with information about land area burning frequencies and burn necessity, as may be deemed necessary by the APCO.
3. Anyone seeking to set fires under this provision shall also comply with the requirements of Section 5-410 and receive written APCO approval of the Smoke Management Plan (SMP) prior to any burn.
4. No burning is allowed *before* 10:00 a.m. nor shall fires take place or any material added to an existing fire after 3:00 p.m. on any day. This means that an advancing flame front after 3:00 p.m. is prohibited. However, material that is still smoldering after the flame front has passed after 3:00 p.m. is allowed.

5. All marsh management fires are subject to daily burn acreage limitations. The applicable limitation depends on the geographical location of the burn within the District. The following limits apply:
 - a. No person shall conduct a burn without receiving an acreage burning allocation from the APCO and no more than 100 acres of any property shall be burned in a single day. A property is defined as a single parcel of real property or contiguous parcels under the same ownership. A day is from midnight to midnight.
 - b. In addition, for any marsh management fire conducted within the SRCD, the District will coordinate a marsh burning acreage allocation system within the following limitations.

Total daily acreage to be burned shall be determined by the APCO, but in no case shall the total acreage burning allocation exceed 300 acres/day during the Fall burning period and 600 acres/day during the Spring burning period. In addition, no more than 100 acres of any property and no more than 100 acres of all properties designated by the same SRCD hundred-series ownerships shall be burned in a single day during the Fall or Spring burning period.

As an example, suppose the Stone Duck Club (designated as Property 622) requests to burn 120 acres per day during the fall burning period. This duck club would be limited to burning 100 acres (or less depending on the daily acreage burning allocation available when the request is made), and all the other properties in the 600-series group would be prohibited to burn on that day.

6. After some marsh burns are extinguished, peat underneath the burned area may smolder overnight and re-ignite the next day. If this occurs, and the next day is a designated "No-Burn Day," the responsible party will be cited.

Contraband (5-401.14)

These fires must be set or allowed by the public fire official having jurisdiction or by a peace officer. The use of fire must, in the opinion of such officer, be necessary and the material must not be able to be disposed by any other means. This type of fire is allowed throughout the year. Note that some public law enforcement agencies use isolated burn sites to conduct these fires.

The fires are conducted to dispose of contraband. The term "contraband" means any illegal or prohibited goods that have been confiscated by a public law enforcement agency, including, but not limited to explosives, pyrotechnics (fireworks), and illegal drugs.

Wildland Vegetation Management (5-401.15)

Prescribed burning by a state or federal agency, or through a cooperative agreement or contract involving such agencies, conducted on land predominately covered with chaparral, trees, grass, coastal scrub, or standing brush. Any person seeking to set fires under this provision shall comply with the requirements of Section 5-408 and receive written approval of the smoke management plan by the APCO prior to any burn. This type of fire is allowed throughout the year but only on permissive burn days.

1. This fire type involves prescribed burning, which is the planned, controlled application of fire to vegetation to achieve a specific natural resource management objective(s) on land areas selected in advance of that application. These fires are conducted within the limits of a written burn plan and prescription that describes the acceptable range of weather, moisture, fuel, and fire behavior parameters to achieve the desired effects.

2. Pursuant to Section 5-408.1, a prescribed burning SMP should be submitted to the APCO for review at least 30 calendar days prior to the proposed burn. All SMPs must include the information specified in Section 5-408.1.
3. SMPs are reviewed and approved by the assigned Air Quality Specialist in the C&E Division, and by staff in the Meteorology and Quality Assurance Section in the Meteorology and Measurements Division (MQA).
4. All prescribed burning SMPs must be approved in writing by the APCO prior to the burn. The approval letter may include enforceable conditions developed with MQA.

Upon approval by the APCO, the burner must obtain a 24-hour burn day decision. This decision is provided by calling MQA at extension 4915. The decision will include a permissive burn or no-burn notice, which is a final “go” or “no-go” decision applicable to the 24-hour period (midnight–to- midnight) following the day the decision is issued. The decision from MQA also includes a confidence level (high, medium, low) that indicates whether the burner will receive the acreage burning allocation requested by the burner for the next day. The actual allocation to be granted is based on real time meteorological data the next morning.

Note: A 96-hour trend, 72-hour outlook, and a 48-hour burn-day forecast are also available by calling MQA.

5. For each day burning occurs, the actual burn acreage must be reported to the District by telephone no later than 12:00 p.m. the following day. The telephone number is 415-749-4600.
6. Within 30 calendar days after a prescribed burn project is completed, the person responsible for the fire must submit a written post-burn evaluation to the APCO that addresses whether the project objectives were met and describes actual smoke behavior.

Filmmaking (5-401.16)

These fires must be set or allowed by the public fire official having jurisdiction and be part of commercial film or video production activities for motion pictures and television.

1. Any person seeking to conduct this fire type must submit a petition pursuant to the requirements of Section 5-409 and receive APCO approval in writing at least 10 working days prior to the proposed burning event. Such approval shall be available for inspection at the burn location upon request by the APCO.
2. This fire type may be conducted on a "No-Burn Day" provided prior APCO approval in writing is obtained. The applicant must be able to justify a request to burn on other than a Burn Day (e.g., for planning purposes).
3. This fire also requires District notification on the day of each burn, prior to ignition.

Public Exhibition (5-401.17)

These fires must be set or allowed by the public fire official having jurisdiction and be part of a planned civic event designed to educate or otherwise benefit the public.

1. Examples of civic events where these fires are set include, but are not limited to air shows, disaster drills, safety exercises, and consumer product demonstrations.

2. Any person seeking to conduct this fire type must submit a petition pursuant to the requirements of Section 5-409 and receive APCO approval in writing at least 10 working days prior to the burning event. Such approval shall be available for inspection at the burn location upon request by the APCO.
3. This fire type may be conducted on a “No-Burn Day” provided prior APCO approval in writing is obtained. The applicant must be able to justify a request to burn on other than a Burn Day (e.g., for planning purposes).
4. This fire also requires District notification on the day of each burn, prior to ignition.

Administrative Requirements

Agricultural Land Use (5-403)

For material burned under the provisions of Disease and Pest, Crop Replacement, Orchard Pruning and Attrition, Double Cropping Stubble, or Stubble fires, the applicant must certify that the land is to remain in agricultural use in the pursuit of a gainful occupation for at least one year after the proposed burning occurs. The applicant must also certify that they have not influenced the need for burning the material in question for any reason other than the promotion of agricultural land use. If this is not the case, the burn is in violation of the provisions of that specific allowable fire type and the number of piles of material burned shall be noted in the violation report.

Emergency Waivers (5-404)

This section allows the public officer authorized under the Disease and Pest, Hazardous Material or Flood Control fire subsections to grant waivers from all the special conditions in Section 5-111 (Conditional Exemptions) when, in their judgment, such an emergency or summary action is necessary for the public safety.

1. The phrase "necessary for the public safety" includes a need to protect public health and property (including crops) from some risk or danger. For example, the authorizing agency may deem it necessary to waive a pile size or weather condition to safeguard agricultural crops threatened by a disease or pest, or to protect the public from flood or fire hazards.
2. When emergency waivers are granted, the authorizing agency is required to submit a written report to the APCO within 10 calendar days following the burning event. The report must certify: (1) the type and amount of material burned and (2) an explanation for granting the waiver.

Prior District Notification (5-406)

This section requires any person who conducts certain allowable fires in Regulation 5, Section 401 (Section 5-401) to notify the District prior to burning. This prior notification requirement applies to twelve of the (17) allowable fires in Section 5-401. The exceptions to this requirement are described below.

1. All required prior notifications must be made using an Open Burning Notification Form (see Exhibit 2) sent by mail, facsimile at (415) 928-0338 or electronically to openburn@baaqmd.gov. Upon receipt, each Notification Form will be evaluated for completeness and accuracy by assigned C&E staff. Incomplete Notifications (i.e., those without all of the information requested in the Form instructions) will not be processed and invoiced for fee payment until all of the information is provided. Illegible forms will not be processed, and C&E staff will advise the applicant to resubmit a legible form.
2. When evaluating the adequacy of Notification Form information provided, the following will be considered:

- a. **Burn Site Information** - Only one property address is allowed per Form. "Property" is defined in Regulation 5, Section 217, as a single parcel of real property, as determined by the County Assessor. This term includes contiguous (or adjacent) parcels under the same ownership. Any Notification received with more than one property address will not be processed until the question of multiple property addresses is resolved or until separate notification for each property is submitted.
 - b. **Quantity of Material** - The quantity entered should provide an estimate of total amount of material one expects to burn in the 12-month period after the fee payment date. If an additional amount of material needs to be burned during or after this period, then another notification is required.
 - c. **Burn Type** - Only one Allowable Fire Type is allowed per Form. As such, the person filling out the form should only check one fire type. Any Notification received with more than one fire type checked will not be processed until a separate notification for each fire type is submitted.
3. For structural fire training, a separate written notification shall also be made to the APCO at least 10 working days prior to the burn pursuant to the reporting requirements in Regulation 11, Rule 2, Subsection 401.3.

5-401.5 STUBBLE

For any stubble burn conducted in Sonoma County (that portion within the jurisdictional boundaries of the District), a person must receive an acreage burning allocation from the APCO on the day of a planned fire prior to ignition. Prior notification pursuant to Section 5-406 is not required.

For stubble burns conducted elsewhere in the District, no prior notification is required.

5-401.13 MARSH MANAGEMENT and 5-401.15 WILDLAND VEGETATION MANAGEMENT

For these two fire types, instead of prior District notification, a person must receive an acreage burning allocation from the APCO on the day of a planned fire prior to ignition. The person is also required to submit a Smoke Management Plan (SMP) at least 30 days prior to the proposed burning and receive written APCO approval of a SMP prior to any burn.

5-401.16 FILMMAKING and 5-401.17 PUBLIC EXHIBITION

For these two fire types, notification on the day of a planned fire prior to ignition is required. This notification must be made by calling (415) 749-4600 or as prescribed by a condition of an approved open burn petition. A person is also required to submit an open burn petition to the APCO prior to any burn and obtain prior written APCO approval of the petition prior to ignition.

Open Burning Fees (5-411)

This section requires any person who conducts one of the (17) allowable fires in Regulation 5, Section 401 to pay the associated fee as required in District Regulation 3, Schedule V. Open burning fees are generally non-refundable and should be paid prior to burning. The five types of open burning fees are described below.

1. **Prior Notification Fee** – This operation fee should be paid as part of providing notification to the District prior to burning, as required Regulation 5, Section 406. Twelve of the (17) allowable fires in Section 5-401 are subject to this prior notification and fee payment requirement; Disease and Pest, Crop Replacement, Orchard Pruning & Attrition, Double Cropping Stubble, Forest Management, Flood Debris, Fire Training, Flood Control, Irrigation Ditches, Range Management, Hazardous Material, and Contraband.

The fee paid is determined for each property, as defined in Regulation 5, Section 217. Notification fee payment is valid for one year from the fee payment date (the 12-month period after the date the notification fee is paid). Should a person seek to burn an additional amount of material greater than the amount listed in the initial notification during or after the 12-month time period after the fee payment date, then a subsequent notification under Regulation 5, Section 406 and additional operation fee payment should be made prior to burning the additional amount of material.

2. **Marsh Management Fire Fee** – This operation fee is associated with District approval of a marsh management fire smoke management plan (SMP), which must be submitted by the person seeking to conduct this type of fire. The fee should be paid prior to burning and is determined for each property by the proposed acreage to be burned: <50 acres; >50 acres but <150 acres; and >150 acres.
3. **Wildland Vegetation Management Fire Fee** – This operation fee is associated with District approval of a prescribed burning SMP, which must be submitted by the person seeking to conduct this type of fire. The fee should be paid prior to burning and is determined for each prescribed burning project by the proposed acreage to be burned: <50 acres; >50 acres but <150 acres; and >150 acres.
4. **Filmmaking Fire and Public Exhibition Fire Fee** – This operation fee is associated with District approval of a petition, which must be submitted by the person seeking to conduct either one of these two allowable fires.

The fee paid is valid for the burn project approval period, which is determined by the District.

5. **Stubble Fire Fee** – This operation fee applies to any person required to receive an acreage burning allocation to conduct a stubble fire. The fee should be paid prior to burning and is determined for each property by the proposed acreage to be burned: <25 acres; >25 acres but <75 acres; >75 acres but <150 acres; and >150 acres.

Inspector Safety

Air District inspection staff must conduct themselves in accordance with the Air District's Safety Policy, which promotes a safe work environment that will allow employees to perform their work without fear of possible harm to their lives and/or health. It is the Air District's intent to provide a safe workplace, safe equipment, proper materials, and to establish and insist upon safe work methods and practices at all times. At the first sign of danger or threat to safety, Air District inspection staff should remove themselves from harm's way as quickly and safely as possible. Any inspection staff member who believes that he/she has been endangered is to immediately report the incident to his/her supervisor.

There may be cases during an Air District inspector's normal work when circumstances require a judgment call on the part of the inspector as to whether his/her safety may be compromised. In such cases where the inspector elects not to conduct the inspection activity due to safety concerns, the inspector shall notify his/her supervisor to obtain guidance on how to proceed.

These guidelines are intended to provide staff with standardized procedures. District staff may deviate from these guidelines following approval from District management. The guidelines do not modify District regulation

or other applicable law, and do not create binding requirements on the APCO or any entity outside the District. In the event of a conflict between these guidelines and District regulation, the latter will govern.

Exhibits

Exhibit 1 – Application For Permit for Agricultural Fire Disease and Pest Prevention

APPLICATION FOR PERMIT FOR AGRICULTURE FIRE FOR DISEASE AND PEST PREVENTION

To: Agricultural Commissioner, _____ County Department of Agriculture
From: Applicant _____ Date Filed _____
Mail Address _____ Phone _____
Subject: **PERMISSION IS REQUESTED TO BURN:**
Material to be destroyed _____ Acreage/Quantity _____
() Prunings () Trees () Other, specify _____
Type of Pest or Disease _____
Location _____
Land to be used for: () Continuing Agricultural Use () Other, specify _____

Fire Department _____
Address _____ Zip _____
Phone _____ Proposed Burn Date(s) _____

Bay Area Air Quality Management District Regulation 5: Open Burning

ALLOWABLE FIRES: The following fires may be allowed on permissive burn days:
401.1 Disease & Pest: Agricultural fires set for the purpose of disease and pest prevention. The fires must be set or allowed by the Agricultural Commissioner of the County in the performance of official duty. Prior written notification must also be made to the APCO.

VIOLATION OF REGULATION 5 IS A MISDEMEANOR UNDER CALIF. HEALTH & SAFETY CODE, SEC. 42400

Only material specifically described above may be burned. Reasonable amounts of ignition fuel may be used, but may not include asphaltic, rubber or plastic materials.

The material to be burned is subject to inspection by the Agricultural Commissioner or his Staff designee and by Enforcement Personnel of the Bay Area Air Quality Management District.

It is specifically understood that the County reserves the right to revoke this permit at any time if it appears to the Agricultural Commissioner or his Staff designee that the Applicant has failed to comply with the terms and conditions hereof.

Applicant agrees to save and hold harmless, County, its officer, employees and agents from any and all claims, demands, costs, liability or damages to any property of Applicant or for which Applicant may become responsible as a result of issuance of this permit. County makes no representation or warranties of any kind or nature whatsoever with respect to this activity proposed nor does the presence of the Agricultural Commissioner or his Staff designee, in any way, operate to abrogate the above agreement or indemnification hold harmless.

Unless specifically declared an emergency by the Agricultural Commissioner (below), burning is restricted by those conditions specified in Bay Area Air Quality Management District Regulation 5, subsections 111.1 thru 111.9. **Burning conditions must also comply with the regulations of the local fire authority.**

I certify the above statements to be true (signed) _____ Date _____

APPLICATION APPROVED:

Date: _____ By: _____
This material must be burned before (Date): _____ Emergency Waivers granted from Reg. 5 subsection(s): _____

Applicant Note: Submit () completed applications to the Agricultural Commissioner at least ten (10) days before requested date. One copy will be returned as your permit, if approved. Approved permit must be available for inspection when conducting activities hereunder. If impossible to complete burn before expiration date, notify Department of Agriculture immediately.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT, 375 Beale St., Suite 600 San Francisco CA, 94105 (415) 771-6000 6/7/16

Exhibit 2 – Open Burning Regulation 5 Notification Form



**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

**OPEN BURNING
Regulation 5
Notification Form**

For Office Use Only

Invoice #/OB # _____

Invoice Date: _____

Amount Due: \$ _____

Any incomplete or illegible forms will not be processed and will be returned for resubmittal.

Print Legibly **BURNER AND BURN SITE INFORMATION**

1a. Burner Name: _____ 1b. Name of Company Contact: _____

1c. Phone number: (____) _____ 1d. FAX Number: (____) _____ 1e. Email: _____

2. Mailing Address or P.O. Box: _____ City: _____ Zip: _____

3. Burn Site Location: _____ City: _____

County: _____ 4. Material to be burned: _____

Note: It is prohibited to burn residential yard waste, such as leaves, grass, landscape debris, or garden trimmings.

5. QUANTITY to be burned (Total in GALLONS, TONS or CUBIC YARDS): _____ Gallons Tons Cubic Yards (see back for pile size volume)

If you have any questions about the legality of the burn material, please contact your local inspector at (415) 749-4979.

6. Allowable Fire Types – CHECK ONLY ONE of the following fire types

Fire types which are allowed year round. Notification fee payment is valid for 12 months after fee payment date.

Disease and Pest Irrigation Ditches Flood Control

Fire Training Contraband Hazardous Material*

Fire types which are limited to specific burn seasons. Notification fee payment is valid for 12 months after fee payment date.

Double Cropping Stubble (6/1 - 8/31) Flood Debris (10/1 - 5/31)

Range Management (7/1 - 4/30)* Forest Management (11/1 - 4/30)*

Crop Replacement (10/1 - 4/30)* Orchard Pruning and Attrition (11/1 - 4/30)

*Any Forest Management Fire, Range Management Fire, Hazardous Material Fire not related to Public Resources Code 4291, or Crop Replacement Fire for the purpose of establishing an agricultural crop on previously uncultivated land, that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land, is by definition in Regulation 5 regulated as a Wildland Vegetation Management Fire and subject to the requirements and fees applicable to Prescribed Burning (See Regulation 5, Sections 213, 401.15, and 408 and Regulation 3: Fees, Schedule V)

This notification form is not an application for a burn permit. The Air District does not require a permit to be able to burn. You are required to notify the Air District by submitting this form and paying the notification fee prior to burning. You will receive a fee payment invoice from the Air District upon receipt of a completed notification form.

BURN AUTHORIZATION (complete this section only if required by local fire agency)

Authorizing Public Official: _____ Tel: (____) _____

Title: _____ Date Authorized: _____

Authorizing Agency: _____

Fires are allowed by the public fire official having jurisdiction. Submission of and payment with this form does not relieve the person setting the fire of the responsibility to comply with any other rule or law governing the use of fire. By submitting this notification form, I understand and acknowledge the applicable restrictions set forth in Regulation 5: Open Burning.

Signature of Responsible Person Setting the Fire (REQUIRED): _____ Date: _____

SEE BACK OF THIS FORM FOR ADDITIONAL OPEN BURNING INFORMATION AND NOTIFICATION FORM AND FEE PAYMENT INSTRUCTIONS

ALSO SEE ATTACHED OPEN BURNING FEE SCHEDULE FROM DISTRICT REGULATION 3: FEES, SCHEDULE V

YOU MAY ONLY CONDUCT THE BURN ON A "PERMISSIVE" BURN DAY. CALL THE 24-HOUR BURN STATUS HOTLINE AT 1-800-792-0787 TO OBTAIN THIS INFORMATION.

375 Beale Street, Suite 600 • San Francisco, California 94105 • (415) 749-5000 • FAX (415) 928-0338

OPEN BURNING NOTIFICATION FORM AND FEE PAYMENT INSTRUCTIONS

Clearly print the requested information on the notification form. Provide complete and accurate data.

Please carefully read and follow these instructions

1a. Burner or Company Name

Enter name of person or name of the company business that is setting the fire. Example: John Smith or Smith Vineyard Management.

1b. Company Contact Name

Enter the name of the company contact person. Enter same as above if the same as Item 1a.

1c. Telephone Number

Enter the phone number of the person setting the fire or the company contact person.

1d. FAX Number

Enter the facsimile phone number of the person or company business contact who will receive the fee payment invoice, if applicable.

1e. Email

Enter the email address of the person or company business contact who will receive the fee payment invoice, if applicable.

2. Mailing Address or P.O. Box No., City and Zip Code

Enter the mailing address of the person or company business that is setting the fire.

3. Burn Site Location

Enter the property address (only one property address per form) where the burning will be conducted if different from the information in Item 2.

4. Material to be Burned

Enter the type(s) of material to be burned. Please identify crop type(s), if applicable. Example: Grape Vine Pruning.

5. Quantity of Material

Enter an estimate of total amount of material to be burned in the 12-month period after the date you pay the notification fee (fee payment date). If an

additional amount of material needs to be burned during this period, then another notification form with notification fee payment is required.

6. Burn Type

Use the information provided on the front of this form to determine the type of fire for this notification (Also see Reg. 5, Section 401: Allowable Fires). Check only one allowable fire type per notification form.

7. Notification Submittal

Send this completed notification form to the Air District via FAX at (415) 928-0338, by mail to BAAQMD, ATTN: Mail Stop OB2, 375 Beale Street, Suite 600 San Francisco, CA 94105, or electronically to openburn@baaqmd.gov.

Upon receipt of a completed notification form, a fee payment invoice will be sent either to your email or mailing address or by facsimile. Your completed notification form (with the invoice #, invoice date, and amount due entered in the upper right corner of the document) will serve as the fee payment invoice.

8. Notification Fee Payment – two options available

MAIL a check, cashier's check or money order in the invoiced amount to BAAQMD, ATTN: Accounting, 375 Beale St., Suite 600 San Francisco, CA, 94105. Be sure to include the invoice number on your check.

PAY ONLINE using VISA, MasterCard, AMEX, Discover or debit or pre-paid debit cards at: <http://www.baaqmd.gov/permits/open-burn>.

9. On the planned burn date, call the 24-Hour Burn Day Status Recording at (800) 792-0787 prior to burning to determine if it is a Burn Day. Fires are only allowed on "permissive" burn days.

Remember: It is the responsibility of the person who conducts an allowable fire to know and satisfy all of the requirements of Regulation 5, Open Burning. Below are some helpful reminders.

- You must submit a completed Notification Form and pay the notification fee to the Air District prior to burning. After burning has commenced, please be prepared to provide the fee payment invoice # to District Inspectors upon request.
- **You cannot burn residential yard waste such as leaves, grass, landscape debris, or garden trimmings, even if you submit a notification form and pay the notification fee. Burning residential yard waste is prohibited.**
- Contact your local fire official to see if they require a burn permit or to obtain written burn authorization for this form.
- Burn Day Status - Burn only on a "permissive" burn day. Call the 24-Hour Burn Status hotline at 1-800-792-0787.
- Burn Hour Restrictions - Do not burn before 10:00 a.m. Do not ignite or add material to existing fire 2 hours before sunset.
- Smoke Production - Burn piles must be managed to ensure that there is no smoke after sunset.
- Dry Out Material - Material for all types of burns must be dried for 60 days prior to burning, unless otherwise stated in Regulation 5. Material must be reasonably free of dirt and soil.
- Pile Size Limits - The base area of each pile must not exceed 25 square yards and the pile height must be at least two-thirds of the average width of the pile. For a dome shaped pile, the maximum pile size allowed measures 17 foot diameter by 11 foot height, and is 72 cubic yards in size.
- Pile Size Volume - A dome pile of 15 foot diameter by 10 foot height is 52 cubic yards. A 12' x 8' dome pile is 27 cubic yards. A 10' x 6' dome pile is 13 cubic yards. A 6' x 4' dome pile is 3 cubic yards.
- Burn Pile Material – Material to be burned must meet the "Allowable Fire" descriptions stated in Regulation 5, Section 401. Check the pile for illegal material and remove any before ignition. Do not co-mingle illegal material in allowable burn piles.
- Ignition - Use proper ignition material such as matches or propane torches. Do not ignite with diesel fuel.
- Wind Conditions - Material should not be ignited when the wind velocity is less than 5 miles per hour. In order to minimize local nuisances caused by smoke, burn piles should not be ignited when the wind direction is toward a populated area.

Hazardous Material Fires are for reducing the risk of wildfire. Hazardous material includes, but is not limited to, natural vegetation or native growth cleared away to create or maintain a firebreak around any building or structure.

Orchard Pruning and Attrition Fires are for the disposal of periodic prunings and attrition losses from fruit trees, nut trees, vineyards and cane fruits.

Emergency Waivers from parts of Section 5-111 for Flood Control or Disease and Pest Burns must satisfy Regulation 5, Section 404.

Exhibit 3 - Marsh Management Fire Smoke Management Plan

FORM MM-1



**MARSH MANAGEMENT FIRE
SMOKE MANAGEMENT PLAN**

(Please complete the following information)

1. Property Number & Name: _____ 2. Proposed Acreage to be burned: _____
3. Property Location: (Provide only one of the following location descriptions)
 Legal: Township _____ Range _____ Section(s) _____ or,
 Lat/Long: North Latitude _____ (deg.) _____ (min) _____ (sec)
 West Longitude _____ (deg.) _____ (min) _____ (sec)
4. Fire Agency: _____ 5. County: _____
6. Burner's Name: _____ 7. Phone Number _____
8. Burner's Address (street, city, zip code): _____

Note: Please include 3 copies of your property map with this document

9. Field Contact Name: _____ 10. 24-Hour Phone Number _____
11. Burn Season: Fall / Spring Year _____
12. Proposed maximum number of acres to be burned per day: _____
13. Specify number of people on burn site during burn: _____
14. Vegetation type(s) to be burned:

Tall Emergent (cattails, tules, phragmites, etc.)					Number of Acres: _____
Average height					
Average % cover	0 to 1 ft	1 to 5 ft	5 to 8 ft	8 to 10 ft	10 ft and over
76-100%	<input type="checkbox"/>				
52-75%	<input type="checkbox"/>				
26-50%	<input type="checkbox"/>				
0-25%	<input type="checkbox"/>				

Low Emergent (salt grass, baltic rush, cocklebur, etc.)					Number of Acres: _____
Average height					
Average % cover	0 to 1 ft	1 to 5 ft	5 to 8 ft	8 to 10 ft	10 ft and over
76-100%	<input type="checkbox"/>				
52-75%	<input type="checkbox"/>				
26-50%	<input type="checkbox"/>				
0-25%	<input type="checkbox"/>				

FORM MM-1

Upland Grasslands (Annual grass, rye, vetch, etc.)		Number of Acres: _____				
Average % cover	Average height					
	0 to 1 ft	1 to 5 ft	5 to 8 ft	8 to 10 ft	10 ft and over	
76-100%	<input type="checkbox"/>					
52-75%	<input type="checkbox"/>					
26-50%	<input type="checkbox"/>					
0-25%	<input type="checkbox"/>					

15. Describe the specific resource management objective(s) and goal(s) of burn:

- Eliminate pest weeds
- Open up seedbed for planting
- Other (specify): _____
- Change plant species composition to improve feed/cover
- Control invasive non-desirable vegetation

16. Have other activities (i.e., alternatives to burning) such as discing, mowing, or water management on the proposed burn site been considered or tried at achieving the desired habitat management objectives and goals of your property?

- YES
- NO

If no, explain why not (e.g., vegetation too thick to penetrate by mechanical means, soils are too wet, etc.)

If yes, explain the extent and success of your efforts. _____

17. Describe burn site preparation to be completed prior to burning to minimize potential adverse impacts:

- Create fire breaks
- Flood ditches prior to burning
- Minimize area to be burned with mowing and/or discing
- Other (specify): _____

18. Ignition technique and material to be used, Specify:

- Pressurized diesel torches
- Napalm or Blivets
- Fuses
- Commercial fuses
- Propane or LPG torches
- Commercial safety fuses
- Lighters or matches
- Commercial petroleum gel materials
- Commercial type ignition grenades
- Orchard Torches
- Drip Torches

19. Contingency actions or measures the burner will take in the event that smoke impacts begin to occur:

- Disc incremental firebreaks
- Flood fields and ditches
- Have water pump and hose readily available on-site
- Other (specify): _____

20. Contingency actions or measures the burner will take in the event that the burn is declared "out of control" and continues to advance after 3:00 p.m. or a peat fire is ignited and continues to burn after 3:00 p.m.:

- Disc incremental firebreaks
- Flood fields and ditches
- Other (specify): _____
- Attempt to extinguish fire with water pump and hose on-site
- Call 911 for fire department assistance

FORM MM-1

21. Range of surface wind conditions acceptable to burner for satisfactory burn:

Wind Speed _____ (minimum & maximum, miles/hour)

Wind Direction(s) _____

Note: depending on property location in the Suisun Marsh, a North wind blows smoke into Pittsburgh/Antioch, and a Southeast wind blows smoke into Fairfield and Cordelia.

22. Describe planned method(s) of estimation and interval of weather observations:

Method

- On burn site, visual
- Hand held anemometer
- Remote weather station (at clubhouse, etc.)
- Other (specify): _____

Frequency

- Every 30 min.
- Hourly
- Other (specify): _____

23. Identify all sensitive receptor areas within a 10-mile radius from the burn site and indicate the distance(s) and direction(s) from the burn site to each sensitive receptor area:

Smoke Sensitive Receptor Area	Distance (miles)	Direction From Burn Site

NOTE: Sensitive receptor areas are populated areas and other areas where smoke and air pollutants from a burn project can adversely affect public health and welfare. Examples of such areas include, but are not limited to, towns, cities, highways, major roads, hospitals, nursing homes, schools and airports.

24. Landowner's Certification:

A Marsh Management Fire may be conducted by the designated burner above for this property in accordance with all applicable rules and regulations. By signing below, I certify that the information submitted in this Smoke Management Plan is complete and accurate to the best of my knowledge.

Landowner's Signature _____ Date _____

Print Name _____ Phone Number () _____ FAX () _____

Mailing Address (street, city, zip code): _____

Email Address _____

FormMM-1v3.doc-6/16

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BAAQMD REGULATION 5: OPEN BURNING

INSTRUCTIONS FOR COMPLETING A MARSH MANAGEMENT FIRE SMOKE MANAGEMENT PLAN (FORM MM-1) AND PAYMENT OF OPEN BURNING FEES

GENERAL INFORMATION & APPLICABILITY

Marsh Management fires are open, outdoor fires set for the purpose of improvement of marshland for wildlife habitat. A "marshland" is defined as a type of wetland periodically or permanently covered to a depth of up to 2 meters (6.6 feet) that supports low or tall emergent vegetation. Some examples are diked wetlands, seasonally managed wetlands, unmanaged tidal wetlands, sloughs and open bays.

All Marsh Management fires, irrespective of size, must be certified by the California Dept. of Fish & Wildlife (DFW), previously known as the CA Dept. of Fish & Game (DFG); require a Smoke Management Plan (SMP) approved in writing by the Air District; and require fee payment to the Air District **prior to burning**. In addition, a local fire agency burn permit is required prior to burning in the Suisun Marsh. For burns conducted outside of the Suisun Marsh, contact the local fire agency with jurisdiction at the burn site to determine how to comply with any requirements.

Smoke Management Plan (SMP) Submittal - Completed SMPs should be submitted to:

The CA Department of Fish and Wildlife
2548 Grizzly Island Road
Suisun, CA 94585

Submit your completed SMP as soon as possible prior to the desired burn season to optimize your opportunities to burn. Remember: Regulation 5 **requires** that the plan be received by the Air District at least 30 calendar days prior to the burn.

The SMP must include 3 copies of a detailed property map that identifies the area(s) to be burned (burn site and any interior unit contingency cutoff lines), and all access roads and gates to the property. Also, include an additional map showing the property's location within the marshland.

Marsh Management Fire (Marsh Burning) Fee Payment – required prior to burning

Upon receipt of a completed SMP from the DFW, the Air District will send a fee payment invoice to the landowner. The invoiced fee amount will be based on the "Proposed Acreage to be Burned" as indicated in Item 2. of the SMP and the corresponding fee in the new open burning fee schedule (See Table 1 below for Marsh Burning Fees from Air District Regulation 3: Fees, Schedule V). The fee payment invoice will be sent to the landowner by email, mail or FAX using the email address, mailing address or facsimile number provided in the Landowner's Certification section of the completed SMP.

Fee Payment – two options available

- **MAIL** a check, cashier's check or money order in the invoiced amount to BAAQMD, ATTN: Accounting, 375 Beale Street, Suite 600 San Francisco, CA 94105. Be sure to write the invoice number on your check.
- **PAY ONLINE** using VISA, MasterCard, American Express, Discover, debit or pre-paid debit cards at: <http://www.baaqmd.gov/permits/open-burn>.

MARSH MANAGEMENT FIRE SMP INSTRUCTIONS

Please read and follow these instructions.

Clearly write or print the requested information on the SMP (Form MM-1) and on any attachment as needed. **Completing all fields speeds up the evaluation and approval of your SMP.**

1. Property Number & Name: Give the Suisun Resource Conservation District (SRCD)-designated ownership property number(s) and the property or club name, if applicable. A single SMP may be used for more than one property number when the properties are adjacent and have the same owner.
2. Proposed Acreage to be Burned: Enter the total number of acres you are proposing to burn in the Burn Season indicated below. This amount will determine the corresponding Marsh Management Fire fee, which must be paid prior to burning.
3. Property Location: Give the property address (the actual physical location, not mailing address), and the legal description (township, range, and sections) or the north latitude and west longitude (in degrees, minutes, and seconds) of the property where the burn will be conducted.
4. Fire Agency: Provide the name of the fire agency that has jurisdiction at the burn site. The three fire agencies with jurisdiction in the Suisun Marsh are the Cordelia, Montezuma, and Suisun Fire Protection Districts.
5. County: Enter the county where the burn will be conducted.
6. Burner's Name: Provide the complete name of the person who will be conducting the burn.
7. Burner's Phone Number: Enter the phone number of the person who will be conducting the burn.
8. Burner's Address: Enter the mailing address of the person who will be conducting the burn.
9. Field Contact Name: Provide the name of the person who can be reached by phone at the burn site or on the property during the burn.
10. 24-Hour Phone Number: Provide the phone number of the field contact or person responsible for the burn who can be reached at any time on a day when burning occurs.
11. Burn Season: Indicate whether you plan to burn during the fall burning period (September 1 through October 15) or the spring burning period (March 1 through April 15), and during what calendar year.
12. Proposed Maximum Number of Acres To Be Burned Per Day: Enter the maximum number of acres you are proposing to burn on any given day.
13. Specify Number of People on Burn Site: Indicate how many people will be on the property prior to and during burning to document surface wind conditions, observe smoke behavior, and to ignite, maintain control of, and extinguish the fire.
14. Vegetation Types to Be Burned: (a) enter the estimated number of acres to be burned by vegetation type (i.e., tall emergent, low emergent, and upland grasslands); and (b) for each vegetation type, characterize the arrangement of the vegetation, expressed as average percent cover and average height.

Example: Let's say that you are planning to burn 20 acres of tall emergent vegetation, and you estimate that 25% of the acreage is covered with vegetation with an average height of 5 feet and

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Bay Area Air Quality Management District, 375 Beale Street, Suite 600 San Francisco, CA 94105

MARSH MANAGEMENT FIRE SMP INSTRUCTIONS

Please read and follow these instructions.

Clearly write or print the requested information on the SMP (Form MM-1) and on any attachment as needed. **Completing all fields speeds up the evaluation and approval of your SMP.**

1. Property Number & Name: Give the Suisun Resource Conservation District (SRCD)-designated ownership property number(s) and the property or club name, if applicable. A single SMP may be used for more than one property number when the properties are adjacent and have the same owner.
2. Proposed Acreage to be Burned: Enter the total number of acres you are proposing to burn in the Burn Season indicated below. This amount will determine the corresponding Marsh Management Fire fee, which must be paid prior to burning.
3. Property Location: Give the property address (the actual physical location, not mailing address), and the legal description (township, range, and sections) or the north latitude and west longitude (in degrees, minutes, and seconds) of the property where the burn will be conducted.
4. Fire Agency: Provide the name of the fire agency that has jurisdiction at the burn site. The three fire agencies with jurisdiction in the Suisun Marsh are the Cordelia, Montezuma, and Suisun Fire Protection Districts.
5. County: Enter the county where the burn will be conducted.
6. Burner's Name: Provide the complete name of the person who will be conducting the burn.
7. Burner's Phone Number: Enter the phone number of the person who will be conducting the burn.
8. Burner's Address: Enter the mailing address of the person who will be conducting the burn.
9. Field Contact Name: Provide the name of the person who can be reached by phone at the burn site or on the property during the burn.
10. 24-Hour Phone Number: Provide the phone number of the field contact or person responsible for the burn who can be reached at any time on a day when burning occurs.
11. Burn Season: Indicate whether you plan to burn during the fall burning period (September 1 through October 15) or the spring burning period (March 1 through April 15), and during what calendar year.
12. Proposed Maximum Number of Acres To Be Burned Per Day: Enter the maximum number of acres you are proposing to burn on any given day.
13. Specify Number of People on Burn Site: Indicate how many people will be on the property prior to and during burning to document surface wind conditions, observe smoke behavior, and to ignite, maintain control of, and extinguish the fire.
14. Vegetation Types to Be Burned: (a) enter the estimated number of acres to be burned by vegetation type (i.e., tall emergent, low emergent, and upland grasslands); and (b) for each vegetation type, characterize the arrangement of the vegetation, expressed as average percent cover and average height.

Example: Let's say that you are planning to burn 20 acres of tall emergent vegetation, and you estimate that 25% of the acreage is covered with vegetation with an average height of 5 feet and

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the remaining 75% is covered with vegetation with an average height of 9 feet. To provide the information from this example, enter '20' as the number of acres in the "tall emergent" vegetation type section of the SMP form. Then, in the same section, check the "1 to 5 ft" box on the line that indicates 0-25% coverage and the "8 to 10 ft" on the line that indicates 52-75% coverage.

15. Specific Resource Management Objective(s) and Goal(s) of Burn: Describe the resource management objectives and goals of the burn you are proposing.
16. Consideration of Non-Burning Alternatives: Indicate whether any alternatives to burning have been considered or tried to achieve the resource management objectives and goals of your property. If "yes", explain the extent and success of your efforts. If "no", explain why alternatives to burning were not considered or tried.
17. Burn Site Preparation: Describe what preparations to the burn site you will complete prior to burning to minimize the risk of an "out of control" fire, adverse smoke impacts, and of exceeding burn acreage and burn hour limits.
18. Ignition Technique To Be Used: Describe the technique and materials the burner is planning to use to ignite the fire.
19. Contingency Actions or Measures - Smoke Impacts: Describe what actions **will be taken** by the burner if smoke from the fire adversely impacts any sensitive receptor area. This information may include your ability to extinguish the fire with equipment on the property or with assistance from a fire protection agency.

Note: "Sensitive receptor areas" are populated areas such as towns or cities, major roads, hospitals, schools and airports.
20. Other Contingency Actions or Measures: Describe what actions **will be taken** by the burner if the fire is declared "out of control" or continues to advance after 3:00 p.m., or a peat fire is ignited and continues to burn after 3:00 p.m.
21. Range of Surface Wind Conditions: Provide a proposed range of surface wind directions and a minimum and maximum wind speed range for the time of year under which burning is to be conducted. Note: This weather prescription **must be present** prior to ignition and the prescription **must be verified** during any burning.
22. Method of Estimation and Interval of Weather Observations: (a) describe the method you are planning to use to determine the surface wind speed and wind direction prior to ignition; and (b) indicate how frequently you will verify the wind conditions at the burn site during the fire (hourly, ½ hour, etc.).
23. Distance and Directions to Sensitive Receptor Areas: (a) identify **all** sensitive receptor areas within a 10-mile radius from the burn site; and (b) provide the distance(s) in miles and the compass direction(s) from the burn site to **each** sensitive receptor area identified.
24. Landowner's Certification: To complete the SMP, a landowner of the property where the burn is proposed must certify that the information submitted is complete and accurate. To certify the information, the landowner should sign and print their name and include their phone number and facsimile (FAX) number, email address, mailing address and the certification date.

Table 1: Marsh Management Fire (Marsh Burning) Fees

Proposed Acreage to be Burned	Operation Fee
<50 acres	\$476
>50 acres but < 150 acres	\$648
>150 acres	\$817

Exhibit 4 - Prescribed Burning Smoke Management Plan

FORM Rx-1

 **BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

PRESCRIBED BURNING SMOKE MANAGEMENT PLAN
Provide All of The Following Information Using the Attached Instructions

GENERAL INFORMATION

PREPARER'S NAME & ADDRESS (street, city, zip) _____ DATE _____
PREPARER'S AFFILIATION _____ PHONE # _____
PRIMARY RESPONSIBLE PERSON _____ PHONE # _____
LAND OWNER(S) & MAILING ADDRESS (street, city, zip) _____ PHONE # _____
FIELD CONTACT NAME & 24-HOUR PHONE/PAGER # (during burn) _____

PROJECT DESCRIPTION

1. LOCATION _____
2. OBJECTIVES _____
3. PROJECTED ACREAGE _____ 4. PROJECTED TONNAGE _____
5. TYPE(S) AND ARRANGEMENT OF VEGETATION TO BE BURNED _____
6. FUEL CONDITION _____ 7. COMBUSTION _____
8. PROJECTED BURN SCHEDULE _____
9. EXPECTED DURATION OF PROJECT (a) IGNITION _____ (b) COMBUSTION _____
(c) BURN DOWN _____

SMOKE MANAGEMENT COMPONENTS

10. DIRECTIONS AND DISTANCES TO NEARBY SENSITIVE RECEPTOR AREAS _____
11. METEOROLOGICAL PRESCRIPTION _____
12. SPECIFICATIONS FOR MONITORING AND VERIFICATION OF METEOROLOGICAL CONDITIONS AND SMOKE BEHAVIOR BEFORE AND DURING THE BURN _____
13. SPECIFICATIONS FOR DISSEMINATING PROJECT INFORMATION TO PUBLIC: _____

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14. WHAT CONTINGENCY ACTIONS WILL BE TAKEN DURING THE BURN TO REDUCE EXPOSURE IF SMOKE INTRUSIONS IMPACT ANY SENSITIVE RECEPTOR AREA:

- Halt ignitions, except as needed to maintain control of fire.
- Allow fire to burn to contingency control lines.
- Suppress fire.
- Begin immediate mop up.
- Begin mop up within _____ hours of problem identification.
- Complete mop up within _____ hours of initiation.
- Discontinue mop up if favorable conditions return.
- Other (explain):

15. ATTACH A COPY OF THE ENVIRONMENTAL IMPACT ANALYSIS PREPARED FOR THE BURN PLAN THAT INCLUDES AN EVALUATION OF ALTERNATIVES TO BURNING, IF SUCH AN ANALYSIS IS REQUIRED BY STATE OR FEDERAL LAW OR STATUTE

16. PROJECT FUEL LOADING ESTIMATE (TONS VEGETATION/ACRE) BY VEGETATION TYPE(S) AND A DESCRIPTION OF THE CALCULATION METHOD

17. PARTICULATE MATTER EMISSIONS ESTIMATE INCLUDING REFERENCED EMISSION FACTOR(S) AND A DESCRIPTION OF THE CALCULATION METHOD USED

CERTIFICATION

18. I HEREBY CERTIFY, AS A QUALIFIED PROFESSIONAL RESOURCE ECOLOGIST, BIOLOGIST, OR FORESTER, THAT THE PROPOSED BURNING DESCRIBED ABOVE IS NECESSARY TO ACHIEVE THE SPECIFIC MANAGEMENT OBJECTIVE(S) OF THE SMOKE MANAGEMENT PLAN PREPARED FOR THIS BURN PROJECT.

Signature _____

Date _____

Name (print) _____

Title (print) _____



BAAQMD REGULATION 5: OPEN BURNING

INSTRUCTIONS FOR COMPLETING A PRESCRIBED BURNING SMOKE MANAGEMENT PLAN (FORM RX-1)

GENERAL INFORMATION & APPLICABILITY

All Wildland Vegetation Management fires (i.e., prescribed burning), irrespective of project size, are subject to the Smoke Management Plan (SMP) requirements in Regulation 5, Subsection 408.1.

In addition, for the purposes of this Regulation,

- Forest Management fires
- Range Management fires
- Hazardous Material fires not related to Public Resources Code 4291, or
- Crop Replacement fires for the purpose of establishing an agricultural crop on previously uncultivated land,

That are expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land, are regulated as Wildland Vegetation Management fires. Therefore, these specific fire types are also subject to the prescribed burning SMP requirements in Regulation 5, Section 408.1.

All Smoke Management Plans must be submitted to the Air Pollution Control Officer (APCO) for review at least 30 calendar days prior to the proposed burning (See Regulation 5, Section 408.1).

Exception - When a fire official decides to manage a naturally ignited wildland fire for resource benefits that is expected to exceed 10 acres in size, a SMP must be submitted to the APCO upon request (See Regulation 5, Section 408).

A smoke management plan (SMP) must address individual burn block requirements where they are likely to require different smoke management prescriptions.

INSTRUCTIONS

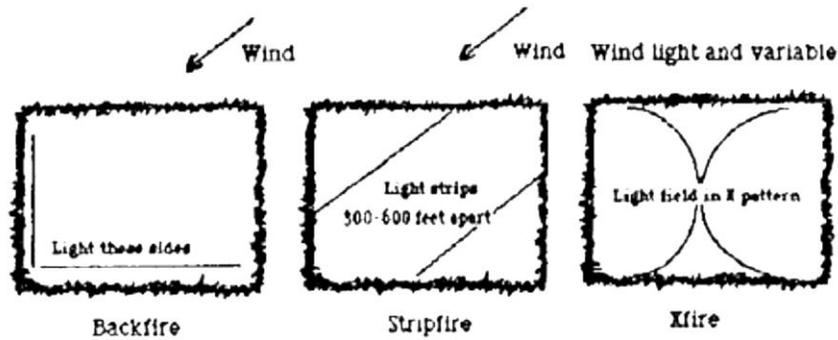
Please carefully read and follow these instructions

1. Location: Give the property address, legal description (township, range, and sections) and the longitude and latitude (degrees, minutes, and seconds) for the burn site. Attach a map of the project area and identify the boundaries and elevation range of the project area, and where applicable, the burn blocks within the area.
2. Objectives: Describe the resource and land management objective(s) or purpose of the burn project.
3. Projected Acreage: Give an estimate of the total number of acres to be burned by vegetation type(s), or if pile burning, the amount of acreage the material in the pile came from. Where the material is located in a series of burn blocks within a project area, provide the acreage for each burn block.
4. Projected Tonnage: Give an estimate of the total amount of vegetation (in tons) available to be consumed by the burn by vegetation type(s). Where the material is located in a series of burn blocks within a project area, provide the amount for each burn block.
5. Type(s) & Arrangement of Vegetation to be burned: Characterize the type, or types of vegetation expressed as a percentage to be burned (grass, chaparral, coastal scrub, etc.), and describe how the vegetation is arranged (mosaic, continuous, vertical depth, etc.).
6. Fuel Condition: Describe the condition or any pre-treatment of the vegetation to be burned (natural standing, piles, windrows, slash, drying time, etc.).
7. Combustion: Provide the expected combustion efficiency of all fuels and the expected percentage of the total amount of material to be burned.

8. **Projected Burn Schedule:** Include the proposed time of year for the burn project (month/year), and the days of the week and number of days on which burning is planned. For example, you could enter August through November on weekdays (Monday-Friday) only. If the material to be burned is located in a series of burn blocks within a project area, then provide a schedule for each burn block, if applicable.
9. **Expected Duration of Project:** Describe the expected duration of ignition, combustion, and burn down in hours and/or days. For example, if you expect the burn project or a burn block within a project area to be completed in one day, then specify the hours of ignition, combustion and burn down for one day of burning. If after ignition the fire is expected to burn more than one day and to be actively burning throughout the night, then indicate the expected ignition period (in hours), and the expected combustion and burn down periods (in hours and days). If the burn ignitions are planned on more than one day but the fire is not anticipated to consume additional material through the evening hours, then indicate the expected ignition, combustion and burn down periods (in hours) for separate days of burning.
10. **Directions & Distances to Nearby Sensitive Receptor Areas:** "Sensitive receptor areas" are populated areas that could be adversely impacted by smoke from the burn project, such as towns or cities, major roads, hospitals, schools and airports. Burn projects with a project area of 10 acres or less must provide a 7.5 Minute USGS topographic map of the project delineating the distance (in miles) and compass direction of sensitive receptor areas within a 5-mile radius from the burn site. Burn projects with a project area greater than 10 acres must include a map showing sensitive receptor areas within a 20-mile radius from the burn site, and also indicate the projected direction(s) of smoke travel while burning in prescription day or night.
11. **Meteorological Prescription:** Provide a detailed meteorological prescription that is realistic for the time of year under which burning is to be conducted. The prescription must include acceptable minimum and maximum ranges of surface wind direction and speed, temperature, relative humidity, 1-hr. and 10-hr. fuel moistures, and the minimum mixing depth or venting elevation. Other considerations may include winds aloft and any other meteorological condition that may affect smoke dispersion and/ or fire behavior. **NOTE:** this prescription **must be present** prior to ignition and the prescription **must be verified** during any burning.
12. **Monitoring & Verification of Meteorological Prescription & Smoke Behavior:** Describe the resources (e.g. equipment, and personnel) and methods or procedures that will be used to verify and document prescription conditions prior to ignition and through completion of the burn. Include what resources and methods or procedures will be used to monitor or track and document (e.g. an observer's log) the behavior of smoke plume(s), and document if sensitive receptor areas are adversely impacted. Also describe what steps will be taken to inform all members of the firing crews, volunteers and employees of smoke management requirements.
13. **Public Notification Procedures:** Describe what notification procedures are to be used to make sure the public is aware of the planned burn (e.g., media announcement, road signs, flyers etc.) and for reporting of public smoke complaints. Include all planned activities and the timing of these activities.
14. **Contingency Actions:** Using the examples provided in the SMP form associated with these instructions, describe what actions will be taken if smoke from this burn project unexpectedly impacts any sensitive receptor area. This information may include the ability to extinguish the fire with equipment on hand or with assistance from a fire protection agency.
15. **Evaluation of Alternatives to Burning:** Attach a copy of the pertinent section(s) of the environmental analysis document prepared for the burn plan or project that describes any alternatives to burning that have been considered and to what extent they have been used, if such an analysis is required by law or statute.
16. **Fuel Loading:** Give an estimate of the total fuel loading within the project area by vegetation type(s), expressed for each type of vegetation (tons of vegetation type/acre). Include a description of the calculation method used to obtain the estimate.
17. **Particulate Matter (PM₁₀) Emissions:** Provide an estimate of the total PM₁₀ emissions (in tons) for the burn project, expressed as a sum total of the PM₁₀ emissions estimates for each vegetation type (tons/vegetation type). Include a description of the calculation method and any literature sources or references used to obtain the estimate.
18. **Certification:** Include the example of the certification language provided in the SMP form associated with these instructions. Be sure to sign and print your name, print your title, and include the certification date.

NOTE: To obtain prescribed burn forecasting services, please contact the BAAQMD duty meteorologist by calling (415) 749-4915. For general questions about open burning requirements, please call (415) 749-5118.

Exhibit 5 – Stubble Burn Ignition Techniques



Stubble Burn Ignition Techniques