# DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

**Air Quality Control Commission** 

# **REGULATION NUMBER 9**

# **OPEN BURNING, PRESCRIBED FIRE, AND PERMITTING**

## 5 CCR 1001-11

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

## I. Scope

This regulation applies to all open burning activity throughout the state.

## II. Definitions

The following definitions apply for the purposes of this Regulation Number 9.

A. Agricultural Open Burning

The open burning of cover vegetation for the purpose of preparing the soil for crop production, weed control, maintenance of water conveyance structures related to agricultural operations, and other agricultural cultivation purposes.

B. Air Curtain Destructor (ACD)

An open burning device that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Devices of this type can be constructed above or below ground and with or without refractory walls and floor. (Air Curtain devices are not conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular and fluidized bed combustors.) Also referred to as air curtain burners and air curtain incinerators.

C. Authorized Local Agency

A local air pollution control authority to which the Division has delegated authority to issue general open burning permits and/or prescribed fire permits.

D. Broadcast Burn

A broadcast burn is the controlled application of fire to wildland fuels in their natural or modified state over a predetermined area. Broadcast burns do not include the burning of wildland fuels that have been concentrated in piles by manual or mechanical methods.

E. Class I Area and Mandatory Federal Class I Area

A class I area is an area listed in Regulation Number 3, Part B, Section V.A.

#### F. Clean Lumber

Wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as, but not limited to, chromium copper arsenate, pentachlorophenol, and creosote. Clean lumber that is dry may only be burned with an ACD.

G. Fuel Treatment

Manipulation, including combustion, or removal of wildland fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control of wildfire.

H. General Open Burn

A planned fire below the prescribed fire de minimis emissions and smoke threshold pursuant to Appendix A.

I. Land Manager

Any federal, state, local or private person or entity that administers, directs, oversees or controls the use of public or private land, including the application of fire to the land.

J. Monitoring

Monitoring includes all methods to observe and record smoke from prescribed fire, including tracking of smoke through visual observation.

K. Natural Wood

Natural wood is wood which was grown as a tree or shrub and which has not been treated. Treated wood may include, but is not limited to: dimensional shaping, kiln drying, chemical drying, painting, pressure treating, or any other modification to the wood beyond cutting.

L. Open Burning

Burning of rubbish, wastepaper, natural wood, vegetative material or any other flammable material on any open premises, or on any public street, alley, or other land adjacent to such premises.

M. Pile Burning

Burning of vegetative material that has been concentrated by manual or mechanical methods and separated into piles.

N. Planned Ignition Fire

A prescribed fire ignited by a specific man-made action intended for the purpose of using the fire for grassland or forest management in which the emissions and smoke levels have the potential to exceed the de minimis threshold pursuant to Appendix A.

O. Planning Document

A document that summarizes the use of prescribed fire as a grassland or forest management tool and the associated discharge or release of air pollution.

## P. Prescribed Fire

Fire that is intentionally used for grassland or forest management, including vegetative, habitat or fuel management, regardless of whether the fire is ignited by natural or human means. Prescribed fire does not include open burning in the course of agricultural operations and does not include open burning for the purpose of maintaining water conveyance structures.

Q. Private Household Trash

Private household trash consists of paper and cardboard. Private household trash does not include food waste, plastic, coated or treated wood, tires and/or rubber, appliances, aerosol/paint cans, insulation or any other non-paper or non-cardboard items.

R. Prescribed Fire Plan, Wildland Fire Use Plan or Burn Plan

A plan that establishes parameters or conditions for conducting a prescribed fire.

S. Significant User of Prescribed Fire

A federal, state or local agency or significant management unit thereof or person that, within any given calendar year:

- 1. Collectively manages or owns more than 10,000 acres of grassland and/or forest land within the state of Colorado; and
- 2. Plans to use prescribed fire to broadcast burn and/or pile burn, where the prescribed fires planned for a calendar year will generate more than ten tons of PM10. See Appendix B of this regulation for information to estimate PM10 emissions from prescribed fires.

The adoption of a fire management plan by a local or county unit of government pursuant to Section 30-11-124, C.R.S., does not constitute management for purposes of this regulation unless the county or local unit of government owns or manages more than ten thousand acres (10,000) and is a significant user of prescribed fire.

T. Smoke Management

Use of techniques to reduce smoke emissions, dilute smoke, identification and reduction of the impact of smoke on smoke-sensitive areas, monitoring and evaluation of smoke impacts from individual and collective burns and coordination among land managers for these purposes.

U. Smoke Sensitive Areas or Receptors

Class I areas and other locations of scenic and/or important vistas, especially during periods of significant public use, urban and rural population centers, schools, hospitals, nursing homes, , recreational areas, and other locations that may be sensitive to smoke impacts for health, and/or aesthetic reasons.

V. Suppression Action or Activities

Any activity in which the land manager or responsible fire agency personnel take appropriate fire management actions intended to actively confine, contain or control a fire. Suppression action may include the use of natural fire barriers such as cliffs, rocks, or rivers as part of a suppression strategy.

## W. Unplanned Ignition Fire

A prescribed fire ignited by natural phenomena or by military munitions. Unplanned ignition fires include wildland fires used for resource benefits and wildland fires ignited by military munitions.

X. Wildfire

Any fire that is not intended for use for grassland or forest management, regardless of whether the fire is ignited by natural or human means.

Y. Wildlands

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

Z. Wildland Fuels

Combustible vegetative materials located on wildlands that can be consumed by fire, including naturally occurring live and dead vegetation, such as grass, leaves, ground litter, plants, shrubs, and trees, as well as excessive buildups of these materials resulting from resource management and other land use activities, as well as from natural plant growth and succession.

#### AA. Wood Waste

Untreated wood and untreated wood products, including tree stumps (chipped only), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings.

BB. Yard Waste

Conifer needles, bushes, shrubs, and clippings from bushes and shrubs, are resulting from maintenance of yards or other private or public lands.

## III. Open Burning Permit Requirements

- A. No person shall conduct any open burning activity not exempted from this regulation without first obtaining an open burning permit from the Division or from an authorized local agency. No person shall burn or allow the burning of rubbish, wastepaper, natural wood, vegetative material, or any other flammable material on any open premises, or on any public street, alley, or other land adjacent to such premises without first obtaining an open burning permit from the Division or authorized local agency.
- B. The following activities are exempt from the requirement to obtain an open burning permit:
  - 1. Noncommercial burning of private household trash in particulate matter (PM10) attainment areas unless local ordinances or rules prohibit such burning.
  - 2. Fires used for noncommercial cooking of food for human consumption or recreational purposes;
  - 3. Fires used for instructional or training purposes, except instructional or training wildland pile or broadcast fires larger than the de minimis thresholds of a low-smoke impact burn pursuant to Appendix A of Regulation Number 9;

- a. Training or instructional fires must comply with all applicable federal, state and local laws, including the demolition notification requirements in Regulation Number 8, Part B, Section III.E.1 for intentional structural fires.
- 4. Safety flares used to signal danger to the public;
- 5. Agricultural open burning

The open burning of animal parts or carcasses is not included in this exemption. Except that, if the State Agricultural Commission declares a public health emergency or a contagious or infectious disease outbreak that imperils the livestock of the state that requires the burning of diseased animal carcasses on weekends or holidays, the owner or operator may conduct open burning of the diseased carcasses after providing telephone notice to the Division and the relevant local health department office by leaving a voicemail message. All necessary safeguards shall be utilized during such non-permitted open burning to minimize any public health or welfare impacts. In addition, the owner or operator shall take steps to ensure that all surrounding and potentially impacted residents, businesses, schools, and churches are notified prior to beginning the open burn; and

- 6. Noncommercial burning of trash in the unincorporated areas of counties of less than 25,000 population according to the latest federal census provided such open burning is subject to regulations of the Board of County Commissioners for such county adopted by resolution and such regulations include, among other things, permit provisions and prohibit any such burning that would result in the exceedance of any National Ambient Air Quality Standards applicable to that portion of the atmosphere to which the general public has access.
- C. Nothing in this regulation shall be construed as relieving any person conducting open burning from meeting the requirements of any applicable federal, state or local requirements concerning disposal of waste materials.

## IV. General Open Burning Permit

- A. General Open Burning Permit Applications
  - 1. Any person seeking authority for open burning or to conduct prescribed fires below the de minimis emissions and smoke threshold pursuant to Appendix A to this regulation may apply for and obtain a general open burning permit subject to the conditions set forth in this section. Significant users of prescribed fire may apply for and obtain a general open burning permit if they also satisfy the requirements of Section VII of this regulation.
  - 2. Persons seeking a general open burning permit must submit to the Division, or the authorized local agency, an application on a Division-approved form. The application must demonstrate that the open burn can and will be conducted in a manner that minimizes the emissions from the burn and the impacts of the smoke on the health and welfare of the public. For prescribed fires under the de minimis threshold, the application must demonstrate the potential for smoke impacts is low as determined by the Division.
- B. Rules Specific to General Open Burning Permits
  - 1. Burning in barrels is prohibited; burning may only be conducted in open burn piles;
  - 2. The maximum acreage for a broadcast burn is 10 acres or less of grass and 5 acres or less of other vegetation;

- 3. Only natural wood, leaves, dry prairie grass, slash and weeds may be burned;
- 4. Prohibited items include, but are not limited to, clean lumber, pallets, tree stumps, tires, chemicals, plastic, construction debris, and furniture;
- 5. All burns must have fire suppression ready at all times.
- C. Open Burning Permit Criteria
  - 1. The Division or authorized local agency shall consider the following factors in determining whether, and upon what conditions, to issue a general open burning permit;
    - a. The location and proximity of the proposed burning to any building or other structure;
    - b. Meteorological conditions on the day or days of such the proposed burning; and
    - c. Compliance by the applicant for the permit with applicable fire protection and safety requirements of the local authority;
    - d. Whether there is any practical alternative method for the disposal of the material to be burned;
    - e. The potential contribution of the proposed burning to air pollution in the area; whether the burning will be conducted using best smoke management techniques so as to minimize emissions and the impacts from the smoke on the health and welfare of the public; and
    - f. The smoke impact potential for prescribed fires pursuant to Appendix A of this regulation.
  - 2. Methods to minimize emissions and smoke impacts may include, but are not limited to:
    - a. The use of permitted air curtain destructors pursuant to Section IV.C.4 of this regulation;
    - b. The use of clean auxiliary fuel;
    - c. Drying the material prior to ignition; and
    - d. Separation for alternative disposal of materials that produce higher levels of emissions and smoke during the combustion process.
  - 3. Any device defined as an incinerator under the Common Provisions is not subject to the permitting requirements under open burning.
  - 4. The Division shall consider the following in determining whether, and upon what conditions, to issue an air curtain destructor (ACD) Permit.
    - a. Device shall burn only yard waste, wood waste, clean lumber, or any mixture thereof generated as a result of projects to reduce the risk of wildfire;
    - b. Whether there is any practical alternative disposal method for the proposed burning;

- c. Whether the applicant will conduct any particular burn in accordance with permit conditions in the general open burning permit application pursuant to Section IV.C. of this regulation;
- d. ACD permit conditions may include, but are not limited to, the following:
  - i. Shall demonstrate within 60 days after beginning operation the device meets the following emission limits:
    - (A) Opacity limit is 10 percent, averaged over 6 minutes, except during startup and malfunctions;
    - (B) Opacity limit is 35 percent, averaged over 6 minutes; during startup period within first 30 minutes of operation;
    - (C) No more than one startup period per day, not to exceed 30 minutes;
    - (D) These limits apply at all times except during malfunctions;
    - (E) Malfunctions shall not exceed a total of one hour per day; and
    - (F) Excess emissions during malfunctions shall be reported in accordance with Common Provisions Regulation, Section II.E.
  - ii. Shall not be co-located with another ACD or any other facility that is required to have an air quality permit or any commercial or industrial facility;
  - iii. Shall be erected and operated in accordance with the manufacturer's recommendation;
  - iv. Shall meet the following if a trench device:
    - (A) Trench dimensions must follow manufacturer's recommendations;
    - (B) Trenches must be maintained with a rectangular opening and vertical sidewalls;
    - (C) Bottom of trench must be above water table and not collect groundwater seepage;
    - (D) Trench must be protected from surface runoff by a berm or other barrier; and
    - (E) Trench cannot be in land filled material containing any solid waste, including construction and demolition debris.
  - v. Shall not exceed the manufacturer's recommended throughput or 20 tons per hour, whichever is less;
  - vi. Shall be operated during daylight hours and not to exceed 13 hours per day;

- vii. Shall emit less than 100 tons of any criteria pollutant per calendar year;
- viii. Shall ensure the fire is extinguished prior to departure from the project site or a fire watch patrol will remain behind to ensure there is no risk of escape or nighttime smoke production. An extinguished fire shall produce no visible smoke;
- ix. Shall be setback from occupied structure on other property, and from perimeter of restricted public access shall be:
  - (A) Minimum 300 ft., for any location where an ACD is operated 14 days or more per year; or
  - (B) Minimum 150 ft., for any location where an ACD is operated for less than 14 days per year.
- x. Shall meet Division's reporting and record keeping requirements; and
- xi. Shall notify the public in smoke-sensitive areas regarding the location, expected duration and projected smoke impacts from the operation.
- D. General Open Burning Permit Conditions

General open burning permits will include, but not be limited to, the following conditions, as appropriate:

1. Air pollution emergencies and alerts

General open burning permits are not valid during periods of publicly announced air pollution emergencies or alerts in the area of the proposed burn. Open burning during such periods may be conducted only with direct written permission from the authority that granted the permit.

2. Smoke management

In order to minimize emissions and smoke impacts, each permittee shall use the best smoke management techniques appropriate to the proposed burn. The permit may allow the use of auxiliary fuels as reasonably necessary to induce proper ignition.

- To the degree practical, all burning shall be conducted during periods conducive to smoke dispersal.
- 4. For burns of piled material, all piles shall be reasonably dry and free of dirt.
- 5. Wind speed

The authority granting the permit may impose conditions on wind speed at the time of the burn to minimize smoke impacts on smoke-sensitive areas.

6. Wind direction

The authority granting the permit may impose conditions on wind direction at the time of the burn to minimize smoke impacts on smoke-sensitive areas.

#### 7. Burn supervision

Open burns must be supervised by a responsible person who must have available the means to suppress the burn if the fire does not comply with the terms and conditions of the permit. Precautions shall be taken to ensure that the burning is restricted to the items and location identified in the permit.

8. Inspection

All open burning operations shall be subject to inspection by the Division and/or the local agency. The permittee shall maintain at the burn site the original or a copy of the permit that shall be made available without unreasonable delay to the inspector.

- 9. The permit shall state that the permit is for compliance with state air pollution control requirements only and is not a permit to violate any existing local laws, rules, regulations, or ordinances regarding fire, zoning, or building. The permittee will notify the appropriate local agencies as required by local regulations and/or ordinances. Permittees also shall ensure that their actions comply with all procedural and substantive requirements contained in state and local air pollution control regulations.
- 10. The permit is valid only for the date or period specified in the permit.
- 11. The Division or local agency may include in the permit other conditions necessary to protect public health and welfare from emissions and smoke impacts.
- 12. Revocation of permit

If at any time the Division or the local agency granting the permit determines that the permittee has not complied with any term or condition of the permit, the permit is subject to partial or complete suspension or revocation or imposition of additional conditions. All burning activity subject to the permit shall be terminated immediately upon notice of suspension or revocation. In addition to suspension or revocation of the permit, the Division or local agency may take any other enforcement action authorized under state or local law.

## V. Planned Ignition Fire Permits

- A. No person shall initiate a planned ignition fire without first obtaining a prescribed fire permit from the Division or authorized local agency unless the potential for smoke impacts are low pursuant to the factors in Appendix A to this regulation. Persons seeking authority to conduct prescribed fires with a low potential for smoke impacts pursuant to Appendix A shall apply for a general open burning permit. Significant users of prescribed fire shall apply for and may obtain a planned ignition fire permit if they also satisfy the requirements of Section VII of this regulation.
- B. Any person seeking authority to conduct a prescribed fire for which the emissions and smoke levels have the potential to exceed the de minimis threshold of a low smoke impact pursuant to Appendix A to this regulation shall apply for and may obtain a planned ignition fire permit on the conditions set forth in this Section V.
- C. Persons seeking a planned ignition fire permit shall submit to the Division or authorized local agency an application on a form approved by the Division for each separate burn. The application must demonstrate that the planned ignition fire can and will be conducted in a manner that minimizes the emissions from the burn and the impacts of the smoke on visibility and on the health and welfare of the public.

- D. The Division or authorized local agency shall consider the following factors in determining whether, and upon what conditions, to issue a planned ignition fire permit:
  - 1. Whether all conditions required for general open burning permit applications pursuant to Section IV of this regulation has been met;
  - 2. Whether the applicant evaluated the use of non-burning fuel treatments in place of the proposed burn;
  - 3. The location of the proposed burn and smoke-sensitive areas and class I areas that might be impacted by the smoke and emissions from the burn;
  - 4. The meteorological conditions under which the applicant proposes to conduct the burn and the measures that the applicant will take to ensure that the burn will be conducted only during those identified meteorological conditions, including coordination with appropriate sources of meteorological information on the day preceding ignition;
  - 5. The smoke risk rating for the proposed burn;
  - 6. The smoke mitigation techniques proposed;
  - 7. Whether the applicant has demonstrated that the applicant will protect scenic and/or important vistas and visibility in class I areas, will minimize the impacts of emissions and smoke on the public, and will minimize the potential for a violation of any ambient air quality standards.
  - 8. Whether the applicant will conduct the burn in accordance with a smoke management plan or narrative that requires:
    - a. That best smoke management methods will be used to minimize or eliminate smoke impacts at smoke-sensitive receptors;
    - b. That the burn will be scheduled outside times of significant visitor use in smokesensitive receptor areas that may be impacted by smoke and emissions from the fire;
    - c. A monitoring plan to allow appropriate evaluation of smoke impacts at smokesensitive receptors;
    - d. That smoke management contingency measures will be taken if unacceptable smoke impacts occur at smoke-sensitive receptors; and
    - e. That measures will be taken to notify the public in smoke-sensitive areas at least twenty-four hours in advance of the planned ignition of the fire regarding the location, expected duration and projected smoke impacts from the fire.
  - 9. Whether the applicant has demonstrated that the proposed burn will conform to all requirements of the state implementation plan; and
  - 10. Whether the actual burn activity that occurs will be reported to the Division or authorized local agency on forms approved by the Division.

E. Planned Ignition Fire Permit Conditions

Planned ignition fire permits shall include, but not be limited to, the following conditions, as appropriate:

- All conditions required for issuance of a general open burning permit pursuant to Section IV of this regulation and all conditions necessary to meet the requirements of this Section V.
- 2. All permit conditions necessary to ensure that the burn will be conducted so as to minimize the impacts of the fire on visibility and on public health and welfare.
- 3. The Division or authorized local agency may allow the applicant to conduct a test fire to evaluate dispersal conditions.
- F. Public Comment
  - 1. The Division will evaluate fires proposed in permit applications to determine whether the fire will pose a high smoke risk. The evaluation will include consideration of the size of the fire area, the type and density of fuel, whether or not the fire is a pile burn, expected duration, and the proximity of the fire to smoke sensitive receptors, such as communities and class I areas.
  - 2. If the Division determines that the fire poses a high smoke risk, the Division will provide appropriate notice to the public, such as by making the information available through the internet and by email, and will issue a draft permit for public comment. The notice will include information about location of the fire, expected burn dates, expected duration, potential emissions, potential air quality and visibility impacts at smoke sensitive receptors and the opportunity for public comment. The procedures in the Commission's Procedural Rules apply to any draft permit subject to the public comment provisions of this paragraph. If the Division receives public comment, it will consider those comments in determining whether to issue a permit and what conditions to impose upon the permittee and within thirty days of the close of the comment period or within thirty days following the close of any public comment hearing, whichever is later, shall either grant or deny the permit.
  - 3. Draft permits for high smoke risk burns that have been subject to the public notice provisions of paragraph V.F.2 and for which a permit has been issued, but which have not been completed within the period for which the permit is valid are not subject to the public comment provisions of paragraph V.F.2. This exception to the public comment requirements applies only: for the geographical unit for which a permit that has been subject to the public comment provisions was issued; if less than ten percent of the area originally permitted has been burned; and for a maximum of five years from the date of issuance of the original permit. The Division may amend the permit, based on a case-by-case analysis, to accommodate minor changes in the permit area without triggering the public comment provisions of paragraph V.F.2.

# VI. Unplanned Ignition Fire Permits

A. Any person may apply for an unplanned ignition fire permit. A permit allows the use of fire for grassland or forestland management although the applicant did not plan the specific time and location of the ignition. Wildfires do not require a permit if the land manager undertakes appropriate suppression activities. Significant users of prescribed fire may apply for and obtain an unplanned ignition fire permit if they also satisfy the requirements of Section VII of this regulation.

- B. Applications for unplanned ignition fire permits shall be submitted to the Division on forms approved by the Division for each area for which a permit is sought. The application submitted by any person shall include a plan and map depicting the area proposed for the permit. The Division may grant unplanned ignition prescribed fire permits for a period of up to five years provided that the information contained in the application remains valid. The Division may amend the permit, based on a case-by-case analysis, to accommodate minor changes in the permit area.
- C. The Division shall consider the following factors in determining whether to grant an unplanned ignition fire permit:
  - 1. Whether the applicant evaluated the use of non-burning fuel treatments in place of allowing unplanned ignition fires to continue burning;
  - 2. The location of the proposed burns and smoke-sensitive areas and class I areas that might be impacted by the smoke and emissions from the burns;
  - 3. The smoke risk rating for proposed burns;
  - 4. The sources of meteorological information that the applicant will use to evaluate potential visibility and smoke and emission impacts from each fire;
  - 5. The meteorological conditions under which the applicant proposes to allow unplanned ignition fires to continue burning without suppression efforts and the suppression measures that the applicant will take if weather at the time of the burn does not meet those identified meteorological conditions;
  - 6. Whether the application demonstrates that the Division will be notified by telephone or by another Division-approved method as soon as possible, but no later than two hours after the start of the next working day, and daily thereafter, of the occurrence of an unplanned ignition fire greater than five acres in size that the applicant intends to use for grassland or forest land management;
  - 7. Whether the application demonstrates that the applicant will evaluate the fire conditions daily to determine whether the fire meets the terms of the permit, including an evaluation based on appropriate information to ensure that ambient air quality standards are not being violated nor visibility goals exceeded;
  - 8. Whether the applicant will conduct the burn in accordance with a smoke management plan or narrative that requires:
    - a. A monitoring plan, including visual observation, to allow appropriate evaluation of smoke impacts at smoke-sensitive receptors;
    - b. That suppression activities will be taken if unacceptable smoke impacts occur at smoke-sensitive receptors;
    - c. That measures will be taken to notify the public, within twenty-four hours of discovery of the unplanned ignition, that the applicant intends to use the fire for grassland or forest land management and of the location and expected smoke impacts from the fire; and
  - 9. Whether the actual burn activity that occurs will be reported to the Division on forms approved by the Division.

D. Unplanned Ignition Fire Permit Conditions

Each unplanned ignition fire permit shall contain, but not be limited to, the following conditions, as appropriate:

- 1. All permit conditions necessary to ensure that the burn will be conducted so as to minimize the impacts of the fire on visibility and on public health and welfare and all conditions necessary to meet the requirements of this Section VI;
- 2. The applicant must promptly initiate suppression action if the fire fails to comply with the permit terms or other activities to ensure that the fire remains within the terms of the permit;
- 3. The applicant must evaluate the fire with appropriate resources to determine whether the fire remains within the permit terms. Appropriate evaluations may include daily monitoring and appropriate modeling to determine whether the fire will minimize the potential for a violation of any ambient air quality standard or otherwise cause unacceptable impacts to human health or welfare, visibility or the environment.

# E. Public Comment

- 1. The Division will evaluate fires proposed in permit applications to determine whether the fire will pose a high smoke risk. The evaluation will include consideration of size of the fire area, the type and density of fuel, and the proximity of the fire to smoke sensitive receptors, such as communities and class I areas.
- 2. If the Division determines that the fire poses a high smoke risk, the Division will provide appropriate notice to the public, such as by making the information available through the internet and by email, and will issue a draft permit for public comment. The notice will include information about location of the fire, expected range of time when a burn may occur and potential air quality and visibility impacts at smoke sensitive receptors. The procedures in the Commission's Procedural Rules apply to any draft permit subject to the public comment provisions of this paragraph. If the Division receives public comment, it will consider those comments in determining whether to issue a permit and what conditions to impose upon the permittee and within thirty days of the close of the comment period or within thirty days following the close of any public comment hearing shall either grant or deny the permit.

## VII. Additional Requirements for Significant Users of Prescribed Fire

A. Applicability

This Section VII applies to activities throughout the state of all significant users of prescribed fire, as defined in Section II.N of this regulation, not specifically exempted by this regulation. The Commission may exempt from the requirements of this Section VII any significant user of prescribed fire upon finding that specific activities of the user will have an insignificant impact on visibility and air quality.

- B. Planning Documents.
  - 1. Significant users of prescribed fire as a grassland or forest management tool shall submit plan's addressing the use and role of prescribed fire and the air quality impacts resulting there from.
  - 2. Planning documents shall:

- a. Specify the area to which they apply, which should be relevant to as large an organizational unit of land as is administratively reasonable;
- b. Specify the time period to which they apply;
- c. Be relevant to vegetative, habitat, and/or fuel management of grassland and/or forest land; and
- d. Explain the decision process and criteria considered or applied to show:
  - i. How the significant user of prescribed fire identifies fuel treatment alternatives to achieve the fuel, habitat, and/or vegetative land management goals;
  - ii. How the significant user of prescribed fire selects among fuel treatment alternatives;
- e. Include a discussion of the alternatives to prescribed fire considered and a discussion of how prescribed fire, if selected, minimizes the risk of wildfire; and
- f. Demonstrate, for land selected for fuel treatment, how the significant user of prescribed fire considered the state standard set forth in Section VII.C and how the user will achieve compliance with that standard.
- 3. Planning documents may summarize the elements of other larger and more general documents.
- 4. Addition of land subject to planning document review
  - a. Significant users of prescribed fire that acquire ownership or jurisdiction over lands after a planning document is submitted shall identify the new land areas to the Division and describe how the new lands will be managed in relation to the requirements of this Section VII.
  - b. New lands that will be managed in the same manner as current lands in the organizational unit described in the planning document will be subject to the same restrictions on permit issuance and conditions as lands already included within the planning document. New lands that will be managed differently than lands already included within the planning document must be addressed in a separate or subsequent planning document submitted to the Commission.
- 5. Change in Ownership
  - a. If a change in majority ownership or agency jurisdiction over lands occur that are subject to this Section VII. and that have an approved planning document, the new owner(s) or authorized agency representative shall, in writing to the Division, identify the new owner(s) or agency and describe whether the new owner(s) or agency will manage the lands as per the approved planning document in relation to the requirements of this Section VII.

b. If the land will be managed in the same manner as under the previous owner(s) or management agency as described in the approved planning document, written notice to the Division is sufficient. If the land will not be managed per the approved planning document, as determined by the new owner/manager or the Division, the new owner or agency manager must address the requirements of this Section VII in a separate or subsequent planning document submitted to the Commission.

# C. Compliance with the State Standard

All prescribed fire activities of significant users of prescribed fire in grassland and forest land management, including activities directly conducted by or on behalf of such users on their lands, shall conform to the state standard to minimize emissions using all available, practicable methods that are technologically feasible and economically reasonable in order to minimize the impact or reduce the potential for such impact on both the attainment and maintenance of national ambient air quality standards and achievement of federal and state visibility goals.

- D. Planning Document Review Process
  - 1. Significant users of prescribed fire shall submit to the Commission planning documents for each area in which the user intends to use prescribed fire for grassland or forest land management.
  - 2. The Division shall review the planning documents submitted to the Commission and shall present its comments and recommendations to the Commission.
  - 3. The Commission shall hold a public hearing to review each planning document. The Commission shall hold the hearing and complete its review of the planning document within forty-five calendar days of receipt of the document unless the significant user of prescribed fire agrees to a longer review period. Only one hearing shall be held for each planning document during the time it is considered applicable unless an additional hearing is requested by the significant user of prescribed fire for an updated or amended planning document.
  - 4. Following the hearing and consideration of the comments and recommendations of the Division and any other information received relative to the planning document, the Commission shall comment and make recommendations to the significant user regarding any changes to the planning document relating to the discharge or release of air pollutants that the Commission finds necessary to comply with the state standard identified in Section VII.C.
- E. Open Burning Permits for Significant Users of Prescribed Fire
  - 1. The Division shall not issue any type of open burning permit to a significant user of prescribed fire or entities acting on its behalf after July 1, 2002, unless a planning document for the area to be burned has been submitted to the Commission for review, public hearing, and comment in accordance with Section VII.D.
  - 2. The Division shall not issue a permit for open burning to a significant user of prescribed fire or entities acting on its behalf after July 1, 2002, unless the permit is consistent with the comments and recommendations made by the Commission concerning the user's planning document pursuant to Section VII.D.

- a. Permit conditions imposed pursuant to this subsection may be excluded from the permit if a federal land manager asserts that the condition is specifically prohibited by federal statute and the Division determines that the assertion is correct.
- b. The Division shall report all such exclusions to the Commission, the Governor and the Director of the Legislative Council within 30 days after the Division grants the exclusion.
- 3. The Division may grant a permit regardless of the prohibition of this subsection if it determines that issuance of the permit is necessary to protect public health and safety.
- 4. For the purposes of this Subsection VII.E, a permit for open burning includes permits for general open burning, planned ignition fires and unplanned ignition fires and related suppression activities, but does not include wildfire or suppression activities associated with wildfire.
- 5. The Division shall not issue a prescribed fire permit to a significant user of prescribed fire for areas with outdated planning documents. For the purposes of this subsection, planning documents shall be considered outdated upon expiration of the time period for which the document is applicable as stated in the document, but in no event longer than 10 years after submission of the planning document to the Commission.

# VIII. Fees for Open Burning and Prescribed Fire

A. Fees for General Open Burning Permittees

The Division shall charge no fees under this regulation to general open burning permit applicants or permit holders.

- B. Planning Document Evaluation Fees for Significant Users of Prescribed Fire
  - 1. Every significant user of prescribed fire submitting a planning document to the Commission as required in Section VII of this regulation shall pay a fee for the direct and indirect cost of evaluating such documents.
  - 2. If the Division requires more than thirty hours to evaluate the planning documents, the fee paid by the significant user of prescribed fire shall not exceed \$3,000, unless the Division has informed the significant user that the billing may exceed \$3,000 and has provided the significant user of prescribed fire with an estimate of what the actual charges may be prior to commencing the work.
  - 3. The planning document review fee shall be calculated at the rate stated in C.R.S. Section 25-7-114.7(2)(a)(III).
  - 4. The Division shall prepare and send a bill at least annually to each significant user of prescribed fire if the Division has spent one or more hours reviewing planning documents from the significant user of prescribed fire. The bill will specify the number of hours spent and the total fee amount. All fees assessed must be received within 30 days of the date of receipt of the written bill. All fees collected under this regulation shall be made payable to the Colorado Department of Public Health and Environment.

# C. Prescribed Fire Fees

- 1. The Division shall charge no flat fee to an applicant for a planned ignition fire permit who applies to an authorized local agency for that permit. Permitting activity and actual burning activity for such permits shall not be counted into SMP scores pursuant to this regulation's Appendix C, "Distribution of Cost" section.
- 2. Except as provided for in VIII.C.1. every permittee pursuant to Section V and VI of this regulation shall pay fees as set forth in the following paragraphs to cover the cost of the smoke management program.
- 3. Fees shall be charged to recover the direct and indirect costs incurred by the Division to operate and administer the smoke management program. Such costs include, but are not limited to: process permit applications; issue permits; compile emission inventory and monitoring information; prepare generally applicable regulations or guidance; model, analyze, and make demonstrations; conduct a compliance assistance and enforcement program; track wildfire activity as needed; operate the fee program; and review plans.
- 4. The Division shall prepare and send a bill at least annually to each permittee specifying each fee type and the total fee amount for the previous calendar year. All fees assessed must be paid within 30 days of the date of receipt of the written bill. All fees collected under this regulation shall be made payable to the Colorado Department of Public Health and Environment.
  - a. Every permit applicant shall pay annual fees regardless of:
    - i. Whether a permit is issued, , suspended, withdrawn, or revoked; and
    - ii. Whether actual burning activity occurred.
- 5. The fee will be calculated in accordance with the Program Cost and Distribution Methodology contained in Appendix C of this regulation.

# IX. Statement of Basis, Specific Statutory Authority and Purpose

A. Adopted January 17, 2002

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5 and implements parts of Sections 25-7-106(7) and (8), 25-7-114.7 and 25-7-123, C.R.S.

## Basis

These rule revisions implement the provisions of Senate Bill 01-214 and relocate, update and reorganize existing provisions of Regulation Number 1 relating to open burning into Regulation Number 9. Regulation Number 9 deals solely with open burning activities. This new regulation contains permitting, monitoring, reporting and fee provisions, as well as requirements particular to significant users of prescribed fire.

## **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Sections 25-7-109(2)(e) and 25-7-123, C.R.S., provides the authority for the Commission to adopt and modify a program including emissions control regulations to control burning activities. Sections 25-7-106(7) and (8), 25-7-114.7(2)(a)(III) and 25-7-123, C.R.S., set forth specific requirements relating to activities by significant users of prescribed fire, including open burning activities by federal land managers. The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S.

# Purpose

## **Open Burning**

The focus of SB 01-214 is on open burning activities by significant users of prescribed fire. Addressing open burning issues is necessary in order to address emissions from natural and prescribed fires. The Grand Canyon Visibility Transport Commission identified these fires as having enough episodic impact on visibility at class I areas to overwhelm progress made through other emission control measures. The Commission views reduction of visibility impairment from fires as an important component in achieving federal and state visibility goals. This regulation should ensure that users of prescribed fire consider air pollution impacts in making determinations whether, and under what conditions, to use fire for grassland or forest management.

## Permitting

The regulation continues the existing prohibition on open burning absent a permit from the Division or a local agency. The exemptions from this requirement also remain largely the same. In particular, agricultural open burning activity does not require a permit.

The regulation specifies factors that the Division must consider in deciding whether, and under what conditions, to issue a burning permit. These factors differ depending on the type of permit applicable to the proposed activity.

General open burning permits are the basic permits for most burning activities. General permits require that an applicant use best smoke management techniques to reduce or eliminate smoke impacts on the health and welfare of the public. Although the regulation includes a partial listing of methods to minimize fire emissions and smoke impacts, the Commission intends that the Division will exercise its discretion to achieve the goals of this regulation without imposing unreasonable conditions. The Division to local counties may delegate general open burning.

The next category of fire addressed by this regulation is planned ignition fires, which are a subset of prescribed fires for grassland and forestland management. The Commission decided to establish emissions and smoke de minimus threshold below which a permit applicant must only obtain a general open burning permit. For fires that will exceed that threshold, applicants intending to initiate a fire must obtain a permit for a planned ignition fire. Permits for this type of fire must address additional concerns beyond those applicable to general open burning activities. The Commission listed factors for Division consideration in determining whether, and under what conditions, to issue a permit. This list is not exclusive and the Division may incorporate in permits additional conditions if it finds them necessary to minimize the impacts of fire on visibility and on public health and welfare. These factors focus on identifying and minimizing impacts to smoke-sensitive receptors. In addition, planned ignition permit conditions should ensure that the permittee would take appropriate action to ensure that the fire remains within the terms of the permit or is managed so as to return it within those terms, or that the permittee will suppress the fire if compliance with permit terms cannot otherwise be achieved.

Unplanned ignition fire permits offer persons a mechanism to use fire for grassland or forest management even though the precise time and location of a particular prescribed fire cannot be anticipated. These permits generally will apply to larger parcels of land, in some portion of which unplanned ignition may occur. The purpose of this permit type is to determine before ignition the conditions under which the fire may be used for resource benefit. As with planned ignition fires, permit conditions should ensure that the permittee will take appropriate action to ensure that the fire remains within the terms of the permit or is managed so as to return it within those terms, or that the permittee will suppress the fire if compliance with permit terms cannot otherwise be achieved.

This regulation focuses on fires that a person intends to use for a beneficial purpose, such as grassland or forest management. The Commission distinguished between those fires and wildfires. Wildfires are beyond the scope of this regulation and no permitting requirements apply to a land manager within whose jurisdiction a wildfire occurs.

The Commission also concluded that a public comment opportunity should be available regarding fires with a high smoke risk. The Commission intends that a high smoke risk rating be equivalent to a rating of 41 or greater from the draft Smoke Risk Rating Worksheet prepared by the Division in conjunction with some users of prescribed fire and attached to this Statement of Basis and Purpose as Attachment A. The Commission recognizes that the Division and users of prescribed fire may find it appropriate to revise the smoke risk rating methodology in the future. If this is done, the Commission intends that what constitutes a high smoke risk burn will consider at least the same factors as in Attachment A, and the point at which a fire becomes a high smoke risk should be equivalent to a rating of 41 on Attachment A.

The Division will determine which fires have a high smoke risk through consideration of the factors reflected in Attachment A. If, after considering these factors, the Division concludes that the fire has a high smoke risk, it will allow the public thirty days in which to submit comments regarding whether a permit should be issued and what conditions are appropriate for inclusion in the permit. For planned ignition prescribed fires, the notice will include information about location of the fire, expected burn dates, expected duration of the fire, potential emissions, and potential air quality and visibility impacts at smoke sensitive receptors. The Commission intends that the Division either add appropriate conditions or combine permits to prevent circumvention of the public comment requirement, should a permit applicant submit separate applications that may have the effect of dividing burns that are more appropriately considered together. This comment opportunity is subject to the Commission's Procedural Rules and includes the rights to a public comment hearing provided in those Rules. The comment opportunity does not include a right to an adjudicatory hearing to appeal issuance of a permit, as only the permit applicant may request such a hearing. Persons would still have recourse to seek judicial review of permits pursuant to the Administrative Procedures Act.

## Significant users of prescribed fire

Senate Bill 01-214 imposes on significant users of prescribed fire additional requirements to ensure that that those users consider air quality impacts in making decisions about when, and under what conditions, they will use fire for grassland or forest management. Senate Bill 01-214 defined a significant user of prescribed fire as a person or agency that collectively manages or owns more than 10,000 acres of land and that use prescribed fire. The Commission enlarged on the part of this definition dealing with use of prescribed fire by establishing a minimum activity level based on PM10 emissions during a calendar year. The Commission concludes that users of prescribed fire at levels below this threshold do not have significant enough an impact on visibility and air quality to justify their inclusion in this part of the smoke management program. This provision will focus the regulatory requirements and the resources of the Division and others on the prescribed fires with the greatest potential impact on visibility and human health and welfare. The Commission did not establish a de minimus threshold for other open burns, as even small fires intended to dispose of trash, rubbish and similar materials may have disproportionate impacts on local air quality.

The regulation imposes additional duties on significant users of prescribed fire, consistent with specific requirements in SB 01-214. Section 25-7-106(8)(b), C.R.S., requires that significant users submit planning documents to the Commission for comment and recommendations. This section also anticipates a hearing on the plans to allow public input. This public hearing requirement is similar to public hearing options applicable to major stationary source permitting. Public input on regulatory compliance and permits for major sources is important to public confidence in air pollution control efforts, particularly for long-term planning documents.

The Commission will hold public hearings to review the planning documents and may make comments and recommendations regarding the plans. Open burning permits for general, planned and unplanned ignition fires can only be issued to significant users of prescribed fire if the permit is consistent with the comments and recommendations of the Commission. The Commission intends that, wherever possible, the Division will issue a permit with appropriate conditions in order to meet this requirement, rather than denying the permit altogether. This approach recognizes the value of prescribed fire in grassland and forestland management, but ensures that the air quality goals of SB 01-214 and this regulation are adequately protected.

The Commission defined planning documents and tailored the applicable regulatory requirements to focus submittals and Commission review on the process used by a significant user of prescribed fire, rather than on the results of that process in a specific instance. The Commission does not intend to challenge land use decisions made by the land manager. The purpose of the Commission comments and recommendations will be to ensure that the land manager adequately considers air quality impacts when making decisions whether, and under what conditions, to use prescribed fire. The Commission planning document review will focus on how a significant user of prescribed fire will meet the state air quality protection standard expressed in Section 25-7-106(7)(e), C.R.S.

Planning documents should summarize the decision process by which the land manager identifies and selects among alternative treatment methods for fuel reduction. The documents should provide a specific description relevant to accomplishment of the state air quality goal expressed in Section 25-7-106(7)(e), C.R.S. This requirement will focus the land manager decision-making process on the goals of Senate Bill 01-214.

The Commission recognizes that planning documents will vary in their level of detail and sophistication in describing decision mechanisms used by land managers, particularly during the initial set of Commission reviews. Commission comments and recommendations may extend to beneficial changes in planning documents as well as improvements in the land manager planning process related to consideration of the state air quality goal.

Specific permit conditions may be excluded from a permit if a federal land manager asserts that a federal statute specifically prohibits the compliance with the condition. In adopting this regulation, the Commission made no evaluation whether any particular federal statute or permit condition may justify exclusion of a permit condition. Nevertheless, Section 118 of the federal Clean Air Act, 42 U.S.C. Section7418, subjects federal agencies engaging in activities resulting, or which may result, in discharge of air pollutants to state requirements on control and abatement of air pollution "in the same manner, and to the same extent as any nongovernmental entity." This waiver of federal sovereign immunity allows states to subject federal agencies to any substantive, procedural, permitting, fee or any other requirement. The Colorado General Assembly enacted Section25-7-106(7), C.R.S., pursuant to Section118 and directed that this subsection be construed to exercise the full extent of the state's authority regarding pollution from federal facilities. The Commission intends these revisions to comport with Section118 and to exercise the state's authority to its full extent. The Division should consider this intent in deciding whether a federal statute specifically prohibits imposition of a particular permit condition.

The rule also establishes a means for dealing with outdated plans or documents. The Commission chose to view a plan as being outdated upon expiration of the period for which the plan itself states it is applicable, up to ten years. The Commission may make comments or recommendations in the review process that urge a shorter applicable period than anticipated in the planning document. Any such comments will recognize applicable constraints on preparation of updated documents, such as the provisions of the National Environmental Policy Act.

The regulation establishes a means for dealing with lands acquired by a significant user of prescribed fire after the Commission reviews an initial or later version of a planning document. The Commission concluded that requiring changes and further review of planning documents whenever a significant user acquires land would unduly increase the burdens of the review process on the Commission, the Division and the land managers. In general, the Commission anticipates addressing planning documents for these lands at the next regular review, so long as the acquired lands will be managed in largely the same way as those already addressed by the Commission. Where there will be a substantial difference in management of the acquired lands, the Commission concluded that the land manager must submit planning documents to address the anticipated management.

## Fees and Monitoring

Senate Bill 01-214 directed the Commission to include within its smoke management program provisions for fees necessary to pay for administration of the program. Since the General Assembly granted the direct authority to develop a fee program for the smoke management program, the Commission is not required to utilize the fee mechanism applicable to traditional stationary sources. The Commission chose to apportion the cost of administering the program among users of prescribed fire rather than relying on traditional emissions fees. In part, this conclusion was due to the unique characteristics of this emission source category including highly variable emissions from one year to the next. Therefore, the Commission concluded that the traditional emission fee approach would result in substantially greater administrative burdens for both the Division and for users of prescribed fire. The methodology adopted combines the proportion of the total number of permits and total PM10 emissions of a particular user to determine the appropriate fraction of the program cost payable by that user. This approach will provide an equitable distribution of the costs of administering the common elements of the program. The Commission intends that fees paid by stationary sources will not be used to pay any portion of the smoke management program costs.

The total administrative cost of \$129,646.45 at the outset is specified in an appendix to the regulation and the Commission intends that any change to it or the distribution methodology occur only through a properly noticed public rule-making hearing before the Commission. To that end, the cost is included in the regulation as the regulatory "fee." The Division cost for program administration will be recalculated annually and reported to the Commission each August. If the total cumulative dollar difference between the cost reflected in the regulation and the Division's annual calculation exceeds five percent, the Division will seek a fee change through a Commission rulemaking. The "total cumulative dollar difference" between the regulatory fee and the annual cost will be calculated considering personnel and indirect and operating costs associated with the program, and the cumulative dollar difference from the previous year. This calculation will be performed substantially in accordance with the Colorado Smoke Management Program Cost and Fee Calculation Template (Attachment B). The Commission also intends that the actual revenue collected be reported annually. If collections are consistently below projections, the Division shall seek an appropriate fee adjustment consistent with the shortfall in revenue.

In addition, the Commission imposed a fee pursuant to Section 25-7-114.7(2)(A)(III), C.R.S., to cover the direct and indirect costs of evaluating planning documents submitted to the Commission. In order to reduce the administrative burden on the Division and permittees, both the evaluation fees and the administration fee will be billed annually.

The rule revisions adopted address the procedural mechanisms for accomplishing the mandatory requirements of Senate Bill 01-214. The general structure of the smoke management program has been established by statute. The Commission's rule implements that legislative prescription; the revisions adopted set a de minimus level for significant users of prescribed fire, establish a fee mechanism and delineate the specifics of the program anticipated by the statute. The Commission concludes that these rule revisions are adopted to implement prescriptive state statutory requirements, where the Commission is allowed no significant policy-making options, for the purposes of Section 25-7-110.5, C.R.S. The Commission also concludes it has no discretion under state law to adopt alternative rules that differ significantly from these revisions, for the purposes of Section 25-7-110.8(1), C.R.S. Accordingly, the Commission did not include in the record some of the portions of the rulemaking prerequisites addressed in Section 25-7-110.5, C.R.S., and did not make specific determinations regarding the factors listed in Section 25-7-110.8(1), C.R.S.

The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

B. Adopted December 19, 2002

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S., and implements parts of Sections 25-7-106(7) and (8), 25-7-114.7 and 25-7-123, C.R.S.

# Basis

This rule revision updates the fee provisions of Regulation Number9. Regulation Number 9 anticipates that the Commission will review and, as necessary, change the fee charged for program administration.

## **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Sections 25-7-109(2)(e) and 25-7-123, C.R.S., provides the authority for the Commission to adopt and modify a program including emissions control regulations to control burning activities. Pursuant to Section 25-7-106(7)(a), C.R.S., the Commission program for significant users of prescribed fire includes fees necessary to administer the program. The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110,5, C.R.S.

## Purpose

When it adopted Regulation Number 9 in order to implement Senate Bill 01-214, the Commission elected to treat the program costs, as the program "fee" required by the legislation. In the regulation, the Commission required the Division to recalculate the program cost annually and to provide a briefing to the Commission each August. Based on the Program Cost and Distribution Methodology contained in Appendix C, the Division calculated the initial cost for the program. The Commission included the total administrative cost of \$129,646.45 for calendar year 2002 in Appendix C to the regulation. In this proceeding, the Commission considered and adopted a change to the projected 2003 program cost and corrected an error in Appendix C. As a result, the "fee" in Appendix C is "\$144,309.85 for calendar year 2003 and succeeding years." The fee amount of \$144,309.85 is intended to apply beginning calendar year 2003. The Division will bill users of the fire program for activity during 2002 using the \$129,646.45 amount. Users of the fire program during 2003, and thereafter if the fee is not adjusted subsequently, will be subject to the \$144,309.85 amount.

The Division calculated the projected program cost for calendar year 2003 as \$144,309.85, representing an increase of 11% over the 2002 fee. This increase largely results from a position within the program that was hired in 2002 and worked only 2 months of that calendar year but will be filled for all of 2003. The calculation is based on the methodology contained in Appendix C. The Commission reviewed the calculation of the changes between the 2002 cost projection and the 2003 cost projection and concluded that the fee amount proposed by the Division represents the program cost for calendar year 2003.

Accordingly, the Commission adopted \$144,309.85 as the program cost and fee to begin in calendar year 2003.

## C. Adopted February 19, 2004

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S.

## Basis

The rule revisions adopted change the method used to distribute the fees for users of planned and unplanned ignition prescribed fire permits utilizing the Division's Smoke Management Program.

## **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Section 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify emissions control regulations pertaining to open burning activities.

The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

## Purpose

In 2002, the Commission adopted regulations to implement the requirements of Senate Bill 99-145 and Senate Bill 01-214 relating to open burning activities by public and private land managers and other significant users of fire for range and forest management. The regulation included a mechanism intended to distribute equitably the cost of the program among the users and to provide revenue certainty to the Division. In practice, fire users subject to the program have experienced substantial uncertainty in their budgeting process because the fee assessments are not determined until the spring following the year for that fee.

The revisions adopted restructure the fee distribution system into the following components. The first is a flat fee of \$1000 per year for all unplanned ignition fire permits. Such permits are valid for up to 5 years. The second is a flat fee for small users of planned ignition prescribed fire, which will be charged \$100 for each permit. Rather than recalculating the program cost share each year for larger users, the Division will determine the three-year average of proportion of permits and actual PM10 emissions for the user. That proportion will be used to divide the program cost among the large users. Although there may be some variations in fees from year to year, they will be smaller than those occurring under the present system. These proportions will be recalculated every three years to accommodate program participation changes among large users.

## D. Adopted February 19, 2004

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5.

# Basis

The rule revisions adopted change the evaluation method used to distinguish between the permit requirements for prescribed fires above and below a threshold depending on the potential for smoke impacts from the fire.

# **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Section 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify emissions control regulations pertaining to open burning activities.

The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

## Purpose

In 2002, the Commission adopted regulations to implement the requirements of Senate Bill 99-145 and Senate Bill 01-214 relating to open burning activities by public and private land managers and other significant users of fire for range and forest management. Those regulations included in Appendix A, a rating table for the Division to use to identify fires with a low enough potential for smoke impact that use of a general open burning permit sufficed to prevent undue air quality impacts. Division experience since that time indicates that the rating table failed to allow sufficient evaluation of the potential impacts from specific fires. In this proceeding, the Commission substituted for the table a more flexible mechanism for the Division to make its determinations. The Commission chose the project size, fuel type, duration and proximity to smoke-sensitive receptors as the most important factors in these evaluations. The Commission has provided guidelines in the Appendix regarding the application of the first 3 factors to identify low smoke risk burns. The final factor shall be addressed in permit conditions. The Commission has also provided that the Division may apply the factors to arrive at somewhat different thresholds as compared to the guideline table in Appendix A as long as the Division provides evidence how the factors are still adequately addressed to ensure the burn is indeed low or no smoke risk. The Commission intends by this change only to simplify and improve the process for assessing smoke impact potential. The purpose of the revisions is not to allow fire users to avoid the more substantial requirements associated with prescribed fire permits unless the potential for smoke impacts is found to be low. The Division is to issue guidance regarding the application of the identified factors to reflect Commission intent.

## E. Adopted February 19, 2004

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5.

# Basis

The rule revisions adopted remove a requirement for an unplanned ignition permit renewal where more than 500 acres burn within a permitted burn area during a calendar year. That requirement prompted unnecessary renewals where the terms of the permit in general remained substantially unchanged.

# **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Section 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify emissions control regulations pertaining to open burning activities.

The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

# Purpose

In 2002, the Commission adopted regulations to implement the requirements of Senate Bill 99-145 and Senate Bill 01-214 relating to open burning activities by public and private land managers and other significant users of fire for range and forest management. Section VI.B of Regulation Number 9 allows the Division to issue unplanned ignition fire permits for up to five years if no more than 500 acres burn within the burn area during any calendar year. The expectation in adopting this provision was that large fires would drive significant changes in the fire use plan. Experience in the interim demonstrates that even large fires have not in most cases required significant changes in the permit. The existing regulation created an undue burden on both permittees and the Division by requiring new applications, proposed permits and public comment processes. This revision reduces that burden in the recognition that the permits remain substantially similar and that the renewal did not serve a significant public interest.

F. Adopted March 12, 2004

This statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5.

## Basis

The rule revisions adopted address the use of air curtain destructors for burning materials generated as a result of projects conducted to reduce the risk of wildfire. Regulation 9 deals with open burning activities and Regulation 3 contains emission notice requirements. The Common Provisions Regulation contains a definition related to these devices.

## **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Section 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify emissions control regulations pertaining to open burning activities. These regulatory changes implement the provisions of the Colorado Air Pollution Prevention and Control Act, 25-7-101, et. seq., that prohibits anyone from operating an air pollution source such as an air curtain destructor without first obtaining a permit.

The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

# Purpose

In 2002, the Commission adopted regulations to implement the requirements of Senate Bill 99-145 and Senate Bill 01-214 relating to open burning activities by public and private land managers and other significant users of fire for range and forest management. Since that action, the public and both state and federal agencies have focused on the risks associated with wildfires, particularly in the forest/urban interface throughout Colorado. The Commission views reduction of the risks associated with wildfires and their potential for serious public health consequences as a result of the emissions from the fires as an important component in protecting public health and the environment. The Commission also views the use of methods to reduce risk that also reduce air pollution emissions compared to other methods as an additional important factor. In this rule adoption, the Commission acted to enlarge the options available to dispose of materials generated by projects conducted to reduce the risks of wildfire. It is the intention of the Commission that practical alternatives to burning be used when they exist.

The Commission reviewed the available emissions data and limited uses proposed for air curtain destructors. That information demonstrated to the satisfaction of the Commission that, with appropriate permit conditions, the destructors can safely be used to dispose of certain materials without endangering public health or causing or contributing to a violation of the National Ambient Air Quality Standards (NAAQS) and will reduce emissions compared to traditional pile burning.

The Division performed an air dispersion modeling analysis on December 30, 2003. The analysis is based on the assumption that the air curtain destructors operate no more than 13 hours per day and no more than 110 days per year at a single site. In addition, it is assumed that no more than 20 tons of fuel will be burned per hour. At this level of operation and fuel throughput, the device would be limited to 110 days per year to meet the restriction in the proposed regulation that no more than 100 tons of any criteria pollutant be emitted per year.

Screening level air quality analyses suggest that emissions from air curtain destructors are not expected to cause violations of the carbon monoxide, sulfur dioxide, and nitrogen dioxide ambient air quality standards except in situations where the air curtain destructor is operated next to a nearby source of air pollutants that is already causing high air pollution impacts in an area that, for one reason or another, has poor existing air quality. The analyses suggest it would be prudent to require setbacks in the regulation to prevent public exposure to potentially elevated PM10 levels near the units. The proposed setbacks of 150 feet and 300 feet for short-term versus long-term sites are reasonable except in situations where the air curtain destructor is located near another stationary source of fugitive PM10 emissions. Accordingly, the rule adopted prohibits co-location of an air curtain destructor with another air curtain destructor or any facility that is required to have an air quality permit or any commercial or industrial facility.

The rule adopted contains specific limitations to assure that the devices are operated consistently with the Commission's expectations. The rule adopted allows disposal of wood products generated by projects conducted to reduce the risks of wildfire. The information presented to the Commission did not demonstrate that air curtain destructors are appropriate for disposal of other materials including clean lumber.

# G. Adopted December 15, 2005

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S., and implements parts of Sections 25-7-106(7) and (8), 25-7-114.7 and 25-7-123, C.R.S.

## Basis

This rule revision corrects clerical errors in published regulations related to the Smoke Management Program. The insertions and deletions to regulatory language in this rulemaking will bring published regulatory language into conformance with what the Commission adopted in actions at past rulemaking hearings.

# **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Sections 25-7-109(2)(e) and 25-7-123, C.R.S., provides the authority for the Commission to adopt and modify a program including emissions control regulations to control burning activities.

The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

# Purpose

In this proceeding, the Commission considered and adopted changes to Regulation Number 9 to bring the published versions of the regulation into conformance with what the Commission adopted during previous rulemaking hearings that occurred on February 19, 2004 and March 12, 2004. The corrections were needed due to clerical errors in the published versions of the rules that remained unnoticed until July 2005.

Accordingly, the Commission adopted corrections to Regulation Number 9.

H. Adopted December 14, 2006

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S.

## Basis

This rule revisions adopted change the percentages used to distribute the fees for users of planned and unplanned ignition prescribed fire permits utilizing the Division's Smoke Management Program.

## **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Sections 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify a program including emissions control regulations pertaining to open burning activities.

The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

## Purpose

In January 2002, the Commission adopted regulations to implement the requirements of Senate Bill 01-214 relating to open burning activities by federal land managers and other users of fire for range and forest management. The regulation included a mechanism intended to distribute equitably the cost of the program among the users and to provide revenue certainty to the Division. The fee distribution portion of the regulation was revised in 2003 at the request of federal land management agencies. Revisions adopted restructure the fee distribution system into the following components. The first is a flat fee of \$1000 for all unplanned ignition fire permits. The second is a flat fee for small users of planned ignition prescribed fire, which are charged \$100 for each permit. Rather than recalculating the program cost share each year for larger users, the Division determines the three-year average of proportion of permits and actual PM10 emissions for the user. That proportion is used to divide the program cost among the larger users. Although there are some variations in fees from year to year, they are much smaller than those occurring under the previous system. These proportions are to be recalculated every three years to accommodate program participation changes among users.

The revisions adopted update the recalculations of the proportions based on recent activity information collected by the Division of users of the smoke management program. The revisions are applicable for fee distribution calculations for users of the program during calendar years 2006, 2007, and 2008; with billing of users based on the adopted percents to occur in 2007, 2008 and 2009, respectively.

I. Adopted June 21, 2007

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S.

## **Statutory Authority**

The Air Quality Control Commission is authorized to adopt these revisions to Regulation Number 9 and Regulation Number 1 pursuant to C.R.S. Sections 25-7-106(7), (8) (2001) and 25-7-123(1) (2001).

## **Basis and Purpose**

## Prescribed Fire Regulation by Counties

Current regulations provide that the Division issues permits for a prescribed fire. This revision clarifies that the Division, as well as local agencies that have been designated agents of the Division, may issue wildland fire permits. The revision also exempts such permits issued by delegated local agencies from State fees. The Division retains oversight of the program should a local agency fail to administer the program as per Regulation Number 9.

The Division is authorized to delegate open burn regulation to local agencies under C.R.S. Section 25-7-111(2)(f). The Division may designate local agencies as agents of the state to administer powers and duties such as open burn regulation. Limited delegations are good policy because local governments are closest to the challenges of conducting such burning. They can work more closely and consistently with a larger number of local landowners to ensure timely inspection of proposed projects, more effective compliance assistance, and more effective smoke monitoring.

This revision is necessary to avoid any confusion among land managers regarding which agency issues burn permits. Over the past thirty years, the Division has designated agencies from twelve counties as agents of the Division for the purpose of administering general open burn permitting. However, the general open burn program is limited to de minimus wildland fuel piles (as defined in Regulation 9 Appendix A). The pine beetle epidemic has changed the needs of all stakeholders. Certain Colorado counties are facing a critical need for tools to use in the management or disposal of dead timber after forests have been devastated by the pine beetle epidemic. The spread of the epidemic has been exponential, creating huge volumes of trees and woody debris to dispose of responsibly. The United States Forest Service estimates that 50-60% of the mature lodge pole trees in Summit County are dead or dying. The numbers climb to 80-90% in Grand County. Eagle County is also heavily impacted. The risk of catastrophic wildfire has increased by these large stands of diseased or dead trees. While no one approach will solve all the problems associated with dealing with the huge volume of trees to be disposed of, responsible burning is one option.

Recently local county agencies and landowners in these areas have contacted the Division regarding the burning of piles of logged trees under local permitting. The Division has been collaborating with local counties affected by the mountain pine beetle epidemic to evaluate the prospect of delegating the prescribed fire program to willing and able county agencies.

It now makes sense to designate local agencies to permit larger pile burns than possible under a general open burning permit. The Division believes that in the face of the pine beetle kill challenge, if local agencies are properly staffed and prepared to assume the responsibilities of permitting, it is appropriate to consider developing a written delegation agreement. Thus, the Division is now working on a delegation for the prescribed fire program to local agencies.

## Training and Instructional Fires

Wildland fuel burns that have a training or instructional component but are large enough to constitute prescribed fires will now be subject to Regulation 9 permitting requirements. Prescribed fires are burns large enough to be over the de minimus low smoke risk threshold in Regulation 9, Appendix A. This change will require the permittees to insure that the smoke is managed responsibly and that public health is considered. Open burns causing de minimus smoke emissions that are used for training purposes are still exempt from permitting requirements.

Prior to this revision, Regulations 1 and 9 exempted all training and instructional fires from permitting by the Division. However, this exemption does not reflect the realities of wildfire suppression training. Few, if any, burns are used exclusively for wildland fire suppression training. These burns accomplish several objectives in addition to training, such as habitat improvement, weed control, and wildfire fuel control. Most prescribed fires are used for training to some degree. Prior to this revision, these fires would arguably be entitled to an exemption.

Prescribed fires are, by definition, large with significant emissions that can impact residents in the vicinity of the fire. If the Division were to grant an exemption for every prescribed burn that involves training, few prescribed fires would be permitted. Without a permit, the Division cannot ensure that the land manager is implementing the controls that are necessary to protect public health and safety.

Wildland fire instructors usually consider applying for and obtaining a planned ignition fire permit from the Division as part of the training exercise. This revision reflects that burn permits are necessary for burns that exceed the de minimus smoke emissions threshold and the industry practice of requesting a permit.

The Division is aware of instances where structures were ignited under the training exemption yet did not receive a Demolition Notice from the Division prior to ignition to assure they were free from asbestos. This revision does not require permitting for structural fire fighting training, though it does include a cross reference to Regulation Number 8, Part B, Section III.E.1. concerning the possible need for a Demolition Notice to assure the structure is free of asbestos before the structure is burned.

## J. Adopted June 19, 2008

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S.

# **Basis and Purpose**

The Commission hereby establishes a process to administer planning documents for prescribed fire in the event the ownership of the acreage in question changes. The Commission intends to ensure that new landowners or managers are aware of the planning document that applies to their land and intend to comply with the document.

Any new owner who qualifies as a significant user of prescribed fire and plans to use prescribed fire must do so pursuant to an approved planning document. Significant users of prescribed fire include any public or private entity that owns or manages 10,000 acres or more in Colorado and conducts enough wildland prescribed fire burns such that they generate at least 10 tons of PM10 per year.

Significant users must submit a planning document that explains how decisions are made about fuel treatment options and how the entity complies with applicable standards. The Commission reviews and approves the planning document following a public hearing. The Division may not issue prescribed fire permits to a significant user without an approved or valid planning document.

In the event of a change of ownership or management associated with acreage that is subject to a planning document, the Division will seek a written commitment from the new owner or land manager to comply with the document. The Division will no longer issue permits until a written commitment is received regarding the existing plan or the new owner or manager has submitted a new or amended planning document that is approved by the Commission at a public hearing.

# **Specific Statutory Authority**

C.R.S. Section 25-7-106(7) and (8) authorizes and directs the Commission to develop a program to minimize impacts of actions by significant users of prescribed fire, including a requirement that significant users submit planning documents to the Commission.

K. Adopted December 19, 2008

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Sections 25-7-110 and 25-7-110.5, C.R.S.

## Basis

The rule revisions adopted change the percentages used to distribute the fees for users of planned and unplanned ignition prescribed fire permits utilizing the Division's Smoke Management Program. This rule revision also increases the cost of the smoke management program. Regulation Number 9 anticipates that the Commission will review and, as necessary, change the fee charged for the program. Finally, numerous format edits of Regulation Number 9 are adopted to achieve more consistency between Commission regulations.

# **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, Sections 25-7-109(2)(e) and 25-7-123, C.R.S., provides the authority for the Commission to adopt and modify a program including emissions control regulations to control burning activities. Pursuant to Section 25-7-106(7)(a), C.R.S., the Commission program for significant users of prescribed fire includes fees necessary to administer the overall smoke management program. The Commission's action is taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

# Purpose

In January 2002, the Commission adopted regulations to implement the requirements of Senate Bill 01-214 relating to open burning activities by federal land managers and other users of fire for range and forest management. The regulation included a mechanism intended to distribute equitably the cost of the program among the users and to provide revenue certainty to the Division.

The fee distribution portion of the regulation was revised in 2003 at the request of federal land management agencies. Revisions adopted restructure the fee distribution system into the following components. The first is a flat fee of \$1000 for all unplanned ignition fire permits. The second is a flat fee for small users of planned ignition prescribed fire, which are charged \$100 for each permit. Rather than recalculating the program cost share each year for larger users, the Division determines the three-year average of proportion of permits and actual PM10 emissions for the user. That proportion is used to divide the program cost among the larger users. Although there are some variations in fees from year to year, they are much smaller than those occurring under the previous system. These proportions are to be recalculated every three years to accommodate program participation changes among users.

The revisions adopted update the recalculations of the proportions based on recent activity information collected by the Division of users of the smoke management program. The revisions are applicable for fee distribution calculations for users of the program during calendar years 2009, 2010, and 2011; with billing of users based on the adopted percents to occur in 2010, 2011 and 2012, respectively.

When it adopted Regulation Number 9 in order to implement Senate Bill 01-214, the Commission elected to treat the program costs, as the program "fee" required by the legislation. In the regulation, the Commission required the Division to recalculate the program cost annually and to provide a briefing to the Commission each August. Based on the Program Cost and Distribution Methodology contained in Appendix C, the Division calculated the initial cost for the program. The Commission included the total administrative cost of \$129,646.45 for calendar year 2002 in Appendix C to the regulation. In a later proceeding, the Commission considered and adopted a change for the projected 2003 program to "\$144,309.85 for calendar year 2003 and succeeding years." In 2005, the Commission again adopted a change for 2005 and succeeding years of \$174,585.08.

The Division calculated the projected program cost for calendar year 2009 as \$199,305.13, representing an increase of 14% over the 2005-2008 program cost. This increase largely results from small, accumulated increases in salaries and benefits for the Division positions supporting the SMP and a new charge for vehicle use. The calculation is based on the methodology contained in Appendix C. The Commission reviewed the calculation of the 2009 cost projection and concluded that the cost of the program amount proposed by the Division represents the program cost for calendar year 2009 and succeeding years. Accordingly, the Commission adopted \$199,305.13 as the program cost and fee to begin in calendar year 2009.

Finally, in this proceeding the Commission considered and adopted format changes and edits to bring Regulation Number 9 into conformance with other Commission regulations. Accordingly, the Commission adopted the changes to Regulation Number 9.

## L. Adopted December 15, 2011

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, sections 25-7-110 and 25-7-110.5, C.R.S.

## Basis

The rule revisions adopted change the percentages used to distribute the fees for users of planned and unplanned ignition prescribed fire permits utilizing the division's Smoke Management Program.

# **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, section 25-7-106(7)(a), C.R.S., provides authority to the Commission to develop a fee program for the Division's Smoke Management Program. Section 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify emissions control regulations pertaining to open burning activities.

The Commission's action is taken pursuant to procedures set forth in sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in section 25-7-109(1)(b), C.R.S.

# Purpose

In January 2002, the Commission adopted regulations to implement the requirements of Senate Bill 01-214 relating to open burning activities by federal land managers and other users of fire for range and forest management. The regulation included a mechanism intended to distribute equitably the cost of the program among the users and to provide revenue certainty to the Division.

The fee distribution portion of the regulation was revised in 2003 at the request of federal land management agencies. Revisions adopted restructure the fee distribution system into the following components. The first is a flat fee of \$1000 for all unplanned ignition fire permits. The second is a flat fee for small users of planned ignition prescribed fire, which are charged \$100 for each permit. Rather than recalculating the program cost share each year for larger users, the Division determines the three-year average of proportion of permits and actual PM10 emissions for the user. That proportion is used to divide the program cost among the larger users. Although there are some variations in fees from year to year, they are much smaller than those occurring under the previous system. These proportions are to be recalculated every three years to accommodate program participation changes among users.

The revisions adopted update the recalculations of the proportions based on recent activity information collected by the division of users of the smoke management program. The revisions are applicable for fee distribution calculations for users of the program during calendar years 2012, 2013 and 2014; with billing of users based on the adopted percents to occur in 2013, 2014 and 2015, respectively.

M. February 19, 2015

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, sections 25-7-110 and 25-7-110.5, C.R.S.

## Basis

The rule revisions adopted change the percentages used to distribute the fees for users of planned and unplanned ignition prescribed fire permits utilizing the division's Smoke Management Program.

# **Specific Statutory Authority**

The Colorado Air Pollution Prevention and Control Act, section 25-7-106(7)(a), C.R.S., provides authority to the Commission to develop a fee program for the Division's Smoke Management Program. Section 25-7-109(2)(e), C.R.S., provides the authority for the Commission to adopt and modify emissions control regulations pertaining to open burning activities.

The Commission's action is taken pursuant to procedures set forth in sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in section 25-7-109(1)(b), C.R.S.

# Purpose

In January 2002, the Commission adopted regulations to implement the requirements of Senate Bill 01-214 relating to open burning activities by federal land managers and other users of fire for range and forest management. The regulation included a mechanism intended to distribute equitably the cost of the program among the users and to provide revenue certainty to the Division.

The fee distribution portion of the regulation was revised in 2003 at the request of federal land management agencies. Revisions adopted restructure the fee distribution system into the following components. The first is a flat fee of \$1000 for all unplanned ignition fire permits. The second is a flat fee for small users of planned ignition prescribed fire, which are charged \$100 for each permit. Rather than recalculating the program cost share each year for larger users, the Division determines the three-year average of proportion of permits and actual PM<sub>10</sub> emissions for the user. That proportion is used to divide the program cost among the larger users. Although there are some variations in fees from year to year, they are much smaller than those occurring under the previous system. These proportions are to be recalculated every three years to accommodate program participation changes among users.

The revisions adopted update the recalculations of the proportions based on recent activity information collected by the division of users of the smoke management program. The revisions are applicable for fee distribution calculations for users of the program during calendar years 2015, 2016 and 2017; with billing of users based on the adopted percents to occur in 2016, 2017 and 2018, respectively.

N. Adopted May 21, 2020

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, § 24-4-103, C.R.S., the Colorado Air Pollution Prevention and Control Act ("Act"), §§ 25-7-110 and 25-7-110.5, C.R.S., and the Air Quality Control Commission's ("Commission") Procedural Rules.

## Basis

The rule revisions added additional best smoke management techniques, clarified/added definitions, removed language that was no longer applicable or appropriate, removed the specific Smoke Management Program (SMP) scores that change every three years, and enlarged the timeframe regarding notice requirements prior to a prescribed burn.

# **Specific Statutory Authority**

The Act, §§ 25-7-109(2)(e) and 25-7-123, C.R.S., provides authority for the Commission to adopt and modify a program, including emissions control regulations, to control burning activities. Section 25-7-106(7)(a), C.R.S. authorizes and directs the Commission to develop a program for significant users of prescribed fire, which includes fees necessary to administer the overall smoke management program. The Commission's actions were taken pursuant to procedures set forth in Sections 25-7-105, 25-7-110 and 25-7-110.5, C.R.S. The Commission took into consideration the appropriate items enumerated in Section 25-7-109(1)(b), C.R.S.

# Purpose

The Commission removed language that is no longer applicable or appropriate. Language regarding fire safety that is not related to air pollution or smoke was removed. Fire safety responsibility pertaining to prescribed fire is currently owned by several entities across the state, including the Colorado Division of Fire Prevention and Control (DFPC), federal land agencies, and local fire and law enforcement jurisdictions.

The Commission removed specific SMP scores, which change every three years, to avoid the need to open and alter Regulation Number 9 on a frequent basis. The revisions did not remove the SMP score calculation, which was retained within Regulation Number 9, Appendix C. The SMP scores will remain readily available by request from customers, reviewed and discussed at the annual SMP stakeholder meeting, and be viewable continuously on the SMP website.

The Commission removed language requiring the Simple Approach Smoke Estimation Modeling by the permittee since it has been determined to be inaccurate and the Division has not required it since approximately 2005-2006. The Division will continue to perform its own modeling before issuing any permits.

The Commission expanded the time public notice may be given. Previously, Regulation Number 9 limited the timing of public notification regarding prescribed fire to no more than five days before ignition. Allowing at the most five days' notice prior to ignition can, in some cases, be insufficient. Allowing the public to take action and/or provide feedback is critical in the prescribed fire process. Therefore, the Commission removed the restriction that permittees cannot provide notice more than five days before the burn.

The Commission added and clarified open burning definitions and requirements which are technologically feasible and economically reasonable and will reduce, prevent and control air pollution in Colorado, as required by § 25-7-102, C.R.S. Furthermore, the revisions also provided greater transparency regarding open burning best smoke management techniques.

## Findings Pursuant to § 25-7-110.5(5), C.R.S.

In accordance with C.R.S. § 25-7-110.5(5)(b) and after considering all of the evidence in the record, the Commission determines:

- (I) EPA does require states with Regional Haze State Implementation Plans, in developing its long-term strategy, to consider smoke management from wildland fires. This requirement does not limit states from developing more stringent requirements for open burning and prescribed fires.
- (II) The federal rules discussed in (I) are primarily performance-based and there is flexibility in those requirements.

- (III) Federal requirements regarding smoke management do not address the issues that are of concern to Colorado and did not take into account concerns unique to Colorado.
- (IV) The proposed revisions will improve the ability of the regulated community to comply in a more cost-effective way by clarifying confusing or potentially conflicting requirements and increasing certainty.
- (V) Any federal requirements regarding visibility have already been implemented and therefore there are no timing issues that might justify changing the time frame for implementation.
- (VI) The proposed revisions will assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth.
- (VII) The proposed revisions maintain reasonable equity in the requirements for various sources.
- (VIII) Colorado citizens may face increased costs due to wildfires and health problems if the proposal is not adopted.
- (IX) There are no federal requirements that specifically regulate prescribed fires and open burning. The proposed revisions include minimal monitoring, recordkeeping, and procedural requirements that are necessary to protect Colorado's citizens and environment.
- (X) Demonstrated technology is available to comply with the proposed revisions since any additional requirements will only clarify best smoke management techniques, which permittees should already be implementing.
- (XI) As set forth in the Economic Impact Analysis, the proposed revisions contribute to the prevention of air pollution and visibility impairment in a cost-effective manner.
- (XII) Although alternative revisions may reduce smoke emissions and visibility impairment, the Commission determined that the division's proposal was reasonable and cost-effective.

## Findings Pursuant to §25-7-110.8, C.R.S.

After considering all of the information in the record, the Commission makes the determination that:

- (I) These revisions are based on reasonably available, validated and reviewed, and sound scientific methodologies demonstrating that exposure to smoke from open burning creates a public health hazard and may lead to a violation of the National Ambient Air Quality Standards. The Commission has considered all information submitted by interested parties.
- (II) Evidence in the record supports the finding that the requirements of these revisions will result in a demonstrable reduction in air pollution and will bring about reductions in risks to human health and the environment, which justify the cost to government, the regulated community and to the public to implement and comply with the rule.
- (III) Evidence in the record supports the finding that the revisions are the most cost-effective, which best balances cost-effectiveness, flexibility to the regulated community and maximization of air quality benefits.

Further, these revisions will include any typographical, grammatical and formatting errors throughout the regulation.

# APPENDIX A DE MINIMIS PRESCRIBED FIRE PROJECTS

Some proposed planned ignition prescribed fire projects for grassland and forest management may emit relatively low amounts of smoke and emissions and be below the de minimis threshold of a low potential for smoke impacts. If so, such projects may apply for a general open burning permit. Alternatively, if a project is above the de minimis threshold, then such projects must apply for and may obtain a planned ignition fire permit. To determine whether a proposed planned ignition prescribed fire is above or below the threshold for low potential smoke impacts, the Division must consider the following factors:

- 1. Size of the project;
- 2. Fuel type
- 3. Duration of the project including smoldering and potential for nighttime smoke; and
- 4. Proximity of the project to smoke sensitive areas

Projects meeting the following guidelines will be considered to have low potential for smoke impacts for the first three factors:

# De Minimis Threshold for Open Burning Permits

| Type of Project | Thresholds   |
|-----------------|--|
| Broadcast Burn  | < 10 acres of grass OR $<$ 5 acres of other vegetation                           |
| Pile Burn       | All piles out cold before sunset, AND No more than 50 piles total in the project |

The final factor, proximity of the project to smoke sensitive areas will be addressed with project permit conditions. The Division may apply the factors and approve different De Minimis Thresholds for good cause shown.

# APPENDIX B ESTIMATING PM10 EMISSIONS FOR THE PURPOSE OF DETERMINING WHETHER A LANDOWNER/MANAGER IS A SIGNIFICANT USER OF PRESCRIBED FIRE

# TABLE I EXAMPLE BURNS Estimated to Potentially Produce 10 Tons of PM10 Emissions

| FUEL TYPE            | SIZE OF<br>BURN | FUEL LOADING<br>ASSUMED | FUEL CONSUMPTION<br>ASSUMED (%) | EMISSION<br>FACTOR<br>(pounds/ton) |
|----------------------|-----------------|-------------------------|---------------------------------|------------------------------------|
| Grass                | 575 acres       | 2 tons/acre             | 87                              | 20                                 |
| Sagebrush            | 191 acres       | 5 tons/acre             | 70                              | 30                                 |
| Oakbrush or<br>Aspen | 556 acres       | 4 tons/acre             | 50                              | 18                                 |
| Pine/Conifer         | 23 acres        | 30 tons/acre            | 48                              | 60                                 |
| Pinon/Juniper        | 476 acres       | 3 tons/acre             | 59                              | 24                                 |
| Piled Slash          | 144,000 ft3     | 38 pounds/ ft3          | 92                              | 8                                  |

Example Calculations:

Example 1

A grass burn of 575 acres that is estimated to have a fuel loading of 2 tons per acre and 98% of the acreage burned (black acreage) is estimated to produce:

([(575 acres x .98) x 2 tons/acre] x 20 pounds/ton)÷ 2000 pounds/ton=11.27 tons of PM10

A landowner/manager completing this burn is a "significant user of prescribed fire" as defined in Regulation Number 9.

Example 2

A manager is proposing to treat 140 acres of mixed conifer in this calendar year. It is estimated the fuel loading is 5 tons per acre and 48% of the area is to be burned. This burn is estimated to produce the following particulate matter emissions:

140 acres x 48% fuel consumption=67.2 black acres

67.2 acres x 5 tons/acre=312 tons of fuel consumed

(312 tons x 60 pounds PM10/ton)÷ 2000 pounds/ton=9.36 tons of PM10

The PM10 emissions are below 10 tons. Based on this single burn, the manager is not defined as a "significant user of prescribed fire" in Regulation Number 9. If additional projects are to be completed in the same calendar year, the manager may be defined as a "significant user of prescribed fire" due to cumulative total PM10 emissions exceeding 10 tons.

## TABLE II SOURCES OF INFORMATION/DATA USED IN TABLE I

| FUEL TYPE            | REFERENCE  | REFERENCE   |
|----------------------|--|---|
|                      | FUEL LOADING   | EMISSION FACTOR   |
| Grass                | Aids to Determining Fuel Models for<br>Estimating Fire Behavior, US Forest Service,<br>1982 and historical activity data     | <u>AP-42,</u> EPA, 1996, Rocky<br>Mountain Grasslands                             |
| Sagebrush            | Average of historical activity data reported to the Division   | US Forest Service, Fire and Air<br>Research Station memo to the<br>Division, 1990 |
| Oakbrush or<br>Aspen | Average of historical activity data reported to the Division   | <u>AP-42,</u> EPA, 1996, Pacific SW<br>Chaparral                                  |
| Pine/Conifer         | <u>AP-42,</u> EPA, 1996, Wildfires and Prescribed<br>Burning, Rocky Mountain. Avg.   | <u>AP-42,</u> EPA, 1996, Rocky<br>Mountain Underburning Pine                      |
| Pinon/Juniper        | Average of historical activity data reported to the Division   | <u>AP-42,</u> EPA, 1996, Pacific SW<br>Pinon/Juniper                              |
| Piled Slash          | <u>Guidelines for Estimating Volume, Biomass,</u><br><u>and Smoke Production for Piled Slash,</u> US<br>Forest Service, 1996 | <u>AP-42,</u> EPA, 1996, Rocky<br>Mountain Logging Slash                          |

# APPENDIX C PROGRAM COST AND DISTRIBUTION METHODOLOGY

Fees that are levied by the Department to cover the costs of the Smoke Management Program are determined using the following methodology.

# Cost of the Smoke Management Program

The Colorado Air Pollution Prevention and Control Act requires that the Smoke Management Program (SMP) fees cover the cost of the program. Section 25-7-106(7)(a), C.R.S. The Air Pollution Control Division's Fiscal Officer determined the cost of the SMP as implemented by this Regulation Number 9. The program cost is built upon estimates of the percent of each position devoted to all aspects of the SMP. This percentage is applied to each position's salary and benefits. Operating costs and indirect costs are also included. The total cost of the SMP is \$174,585.08 for calendar year 2008 and \$199,305.13 for calendar year 2009 and succeeding years.

# Fee Use

Functions of the SMP include but are not limited to: management, administration, permitting operations, modeling support, training of users of prescribed fire regarding air quality concerns and the SMP program, database management and reporting, fee program administration (including database management, invoicing, and/or customer service), regulatory development, guidance development, web page management/maintenance, compliance assistance, enforcement, field work, tracking of, and if necessary, involvement in wildfire monitoring, review of plans and involvement in public hearings, data entry, meteorological forecasting, and consultation on high smoke risk burns.

# Fee Calculation

The annual cost of the SMP will be the SMP fee. The Division's cost of the SMP will be recalculated annually and reported to the Commission each August. If the Division's annual SMP cost calculation exceeds five percent of the SMP fee reflected in the regulation, the Division will seek a fee change through a Commission rulemaking.

The annual SMP cost calculation must utilize the "total cumulative dollar difference" between the regulatory fee and the annual cost. It will be calculated by first computing a total projected SMP cost considering the projected salary and benefits for personnel associated with the program (apportioned according to the percentage of time assigned to the program for each position), indirect costs, travel costs, Division operating costs, Department operating costs and Department indirect costs. That sum will be adjusted by the difference between salary and travel expenses and the previous year's projected salary and travel costs. The Division will complete the calculation of the total cumulative dollar difference by summing: the difference between the adjusted program cost and the previous regulatory fee; and the total cumulative dollar difference from the previous year.

## **Distribution of Cost**

The Division will distribute the cost of the program to permittees as follows:

- 1. The fee for an unplanned ignition prescribed fire permit in effect for an area is \$1000 per permitted area each year the permit is valid. Unplanned ignition prescribed fire permits are valid for up to 5 years.
- 2. The fee for a planned ignition prescribed fire permit for any permittee with a 3-year block average SMP score (see 3 below) under 1.00% is \$100 per permit.
- 3. The fees for planned ignition fire permits for permittees with 3-year block average SMP score of 1.00% or greater shall be determined as follows:

- a. To distribute the cost of planned ignition prescribed permits for larger users of the SMP, each year the Division shall compute a Smoke Management Program Score (SMP score). The SMP score shall be calculated by averaging the percent of total planned ignition prescribed fire permits requested by that permittee in a calendar year; and the percent of total PM10 emissions generated by actual planned ignition prescribed fire burning activity by that entity.
- b. Every three years the Division must compute a 3-year block average SMP score based on the most recent three years SMP scores. The computed 3-year block average SMP score must be applied to the next year's billing cycle, and for the following 2 years. For example, the 3-year block average SMP score for Year 1, Year 2, and Year 3 will be calculated in Year 4. This 3-year block average will be applied to planned ignition prescribed fire fees for activity conducted in Year 5, Year 6, and Year 7. The next calculation would occur in Year 7. Any entity whose SMP score is less than 1.00% shall be removed from the 3-year block average. The SMP scores for remaining users must be re-scaled to 100% after small users have been removed. Upcoming 3-year block average scores are scheduled for 2020, 2023, 2026, etc.
- c. The resulting 3-year block average percent for each entity shall determine how the cost of the program will be distributed. The cost of the program shall have all unplanned ignition fees and small user fees subtracted from it before it is applied to the 3-year block average to determine the fee for planned ignition prescribed fire users with 3-year block average SMP scores at or greater than 1.00%.

# **Editor's Notes**

History

Entire rule eff. 08/30/2007. Rules VII.B.5, IX.J eff. 08/30/2008. Entire rule eff. 01/30/2009. Entire rule eff. 01/30/2012. Rules Appendix C, IX.M eff. 03/30/2015. Rules II, III, IV, V.B, V.D.7, V.D.8.e, VI.D, VIII, VIII.C.4.a.i, IX.N, Appendix A, Appendix C eff. 07/15/2020.