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Memorandum

To: Technical Services and Stationary Sources Staff, Local Agencies, Regulated Community

From: Gordon Pierce, Air Pollution Control Division

Date: 5/8/2015

Re: Guidance for Applying Regulation No. 9's Definition of Agricultural Open Burning

The Colorado Air Quality Control Commission's Regulation No. 9 defines "agricultural open burning" and exempts such burning from the requirement to obtain an air quality permit from the Colorado Air Pollution Control Division (Air Division) or an authorized local agency. The specific exemption language and all of Regulation No. 9's references to agricultural burning are in Appendix A of this memo. The intent of this memo is to provide guidance for interpreting and applying the definition of agricultural open burning. This memo may be revised at any time as warranted.

The Purpose of the Burn

The crux of Regulation No. 9's definition of agricultural open burning pertains to the purpose of the burn. The regulatory definition focuses on four specific purposes:

"Agricultural Open Burning: The open burning of cover vegetation for the purpose of 1) preparing the soil for crop production, 2) weed control, 3) maintenance of water conveyance structures related to agricultural operations, and 4) other agricultural cultivation purposes." [Regulation No. 9, \$II.A; numbering added]

This definition requires consideration of the purpose of the burn. The characteristics of the land, including its various uses, its tax status, its ownership (public or private) and its designation (such as being a tree farm) all may be factors for the Air Division to consider while evaluating the purpose of the burn. But the land's characteristic will not be the only consideration in determining whether a burn meets Regulation No. 9's definition of agricultural open burn. The purposes of the specific burn are key.

The likely purpose of burning <u>piles</u>, most often slash generated from logging and/or creation of defensible space, almost always involves disposal of waste. Determining "the" single purpose of <u>broadcast</u> burning, when vegetation is burned where it grew or fell, can be difficult. As an illustration, formal planning documents for prescribed burns on public land nearly always list multiple purposes. Ripple effects of a broadcast burn are numerous and often complex. They may include changes in suitability for wildlife and domestic livestock and for growing planted crops, timber production, plant pathogens and insect damage, hydrologic functioning, ecological resilience, defensibility from high-intensity wildfire, recreational and aesthetic opportunities, presence and vulnerability to eradication of non-native plants, and others. With the possible exception of burning row crop stubble, single-purpose broadcast burns are uncommon.

Regulation No. 9 implies that a burn whose primary purpose is not agriculture should not be categorized as an agricultural open burn. The definition of agricultural open burning refers to "the" specific agricultural purposes,



not to agriculture as "a" purpose. That is, it refers to the primary if not sole intent. Where there are multiple purposes and agriculture is not clearly dominant, Regulation No. 9 does not automatically categorize the fire as an agricultural open burn.

Air Division Process Regarding Guidance about Agricultural Open Burns

This memo is intended to provide guidance to Air Division staff and to help permittees, local agencies, and others consistently and logically differentiate agricultural open burns from other open burns. The memo includes interpretation of regulations and statute.

This memo is not intended to address specific situations definitively. The individual circumstances of each burn need to be considered. The Air Division's intent is that final decisions be consistent with law and regulation. This memo provides starting points in evaluating individual burns.

Any proponent may ask that a particular burn be considered for exemption as an agricultural open burn. To request a formal determination of whether a particular burn qualifies for smoke permitting purposes as an agricultural open burn, please send a <u>written</u> description of the situation and the logic for an exemption to the Air Division's Technical Services Program Manager at <u>cdphe.commentsapcd@state.co.us</u>. Informal advice about whether a burn should be exempted from permitting as an agricultural open burn may be requested of any staff in the Air Division's Prescribed Fire/Smoke Management Program or Open Burning Program and should precede any formal exemption request. Likely criteria for the evaluation of a request will include indicators:

- of the extent to which the proposed burn has only agricultural purposes;
- that the burning is integral to the raising of a cultivated crop or domestic livestock versus meeting Regulation No. 9's definition of "wildlands"; and
- that the land is used primarily for agricultural purposes.

The remainder of this memo is in flow-charting format. Appendix B shows the flow chart graphically.

Question 1: Is the land being broadcast burned an irrigation ditch or in the Conservation Reserve Program (CRP)¹?

If **no**, go to Question 2.

If yes, there is a presumption that the burn is an agricultural burn and therefore is exempted from air quality permitting requirements.

<u>CRP and ditch burns</u> "for the purpose of maintaining water conveyance structures" are specifically designated in Regulation No. 9 as being agricultural open burns. See sections II (A) and II (V) of the Regulation respectively. CRP is intended to fallow land that otherwise would be planted to agricultural crops.

Burning of vegetative detritus that accumulates in a reservoir is presumed to be agricultural burning. Regulation No. 9 specifically provides for maintenance of water conveyance structures to be treated as agricultural burning. See sections II (A) and II (M) of the Regulation respectively. Although ditches and reservoirs are off-site of cultivated fields, they are treated as a necessary, directly-purposed component of the agricultural operation. If the reservoir waste contains any trash, milled lumber or other material than unprocessed plant waste, it is addressed separately through the Air Division's Open Burning Program.



¹ United States Department of Agriculture Farm Services Agency Conservation Reserve Program. See http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=crp.

Question 2: Is the burn on land that is zoned as agricultural?

If yes, go to question 3.

If **no**, then there is a presumption the burn is <u>not</u> an agricultural burn and therefore does require a smoke permit. This includes most burns on land managed by significant users of prescribed fire².

Whether <u>land is zoned as agricultural</u> is relevant but is not determinative of whether a fire on it should be categorized as an agricultural open burn. In the Air Division's past experience, burns on land not zoned as agricultural tend to have multiple purposes such as creation of defensible space and/or disposal of logging slash, and therefore require a smoke permit. If the land is zoned as agricultural, it may or may not be eligible for an exemption from permitting, based on criteria such as those discussed in question 3 below.

<u>Significant users</u> of prescribed fire hold a large majority of Colorado prescribed fire permits. Most but not all significant users manage multi-use public land. The statutory definition of "agricultural operations" exempted from smoke permitting appears to omit most multi-use public land. "....agricultural operations does not include grassland, forest, or habitat management activities of significant users of prescribed fire conducted on lands the primary purpose of which is nonagricultural...." C.R.S. 25-7-123. Open burns associated with grassland, forest or habitat management on multi-use public lands are thus presumed not to qualify for the agricultural open burn exemption.

Exception: Prescribed fires on public land used exclusively as a commercial farm is presumed to be an agricultural open burn: A situation where the distinction between farming and zoning is less clear than usual involves land that is under a conservation easement. As before the transfer of ownership to a public entity, the farming continues to involve burning of annual stubble from crops raised for commercial sale.

Question 3: Is the burn on land that is used for grazing domestic animals or cultivated at least once every ten years?

If **yes**, then with exceptions such as those described below, the burn <u>is</u> presumed to be an agricultural open burn and therefore is exempted from air quality permitting requirements.

The most obvious instance of agricultural open burning is in support of land that is cultivated and used to raise annual plants. Burning stubble from a commercial annual row crop is presumed to be an agricultural burn.

Broadcast burns or pile burns to dispose of tree materials and brush that are to improve forage for livestock on operating ranches are presumed to be agricultural open burning.

Burning of fruit tree, vine prunings, and cull trees in and from an orchard or nursery is presumed to be agricultural burning. As used in this memo, "tree nurseries" refer to businesses that raise young trees to sell as live transplants. If the trees are brought in from elsewhere for sale, the location is not a "tree nursery" and a permit is required for pile burning. "Orchards" refers to businesses that sell fruit grown on trees. Tree nurseries and orchards involve crop production. Much like crop stubble, burning of prunings and cull is normally done for agricultural cultivation purposes.

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.



 $^{^2 \ \}text{Colorado Air Quality Control Commission Regulation No. 9. \ II. (Definitions) P. Significant User of Prescribed Fired Fired Prescribed Fired Fired Fired Prescribed Fired Fir$

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

Collectively manages or owns more than 10,000 acres of grassland and/or forest land within the state of Colorado;
 and

Burning of habitat for animals that as a species are familiar as unrestrained wildlife but individually are raised in confinement is presumed to be agricultural open burn: This involves burns where the primary purpose is to improve habitat for animals that are traditionally considered wildlife, such as deer or elk, but meet the definition of livestock that are kept in captivity. The animals are privately owned and a state license is not required to hunt the animals. The Air Division considers these animals to be livestock, or a "crop". If the purpose of the burn in question is to prepare the land for managing this captive livestock, the burn is presumed to be an agricultural open burn.

Exception: Row crops raised solely to feed wildlife on public lands are presumed not to be agricultural open burns. In this instance the ultimate intended beneficiary is wildlife rather than the owner of a commercial business.

If no, then the burn is presumed not to be an agricultural open burn and will require an air quality permit.

<u>Designated tree farms and properties classified as forest agriculture.</u> Disposal of slash generated as part of managing a designated tree farm or forest agriculture property is presumed not to be agricultural open burning. Tree farms are certified by the American Tree Farm System as meeting sustainability standards for forest management. Forest Agriculture is a state-sponsored program as described in Colorado statute, <u>CRS 39-1-102</u>. In exchange for agricultural tax status, owners of more than 40 acres of land follow a forest management plan approved by the Colorado State Forest Service that includes production of wood products. These forested lands are indistinguishable from wildlands as defined in Regulation No. 9. Neither grazing of livestock nor crop production is necessarily involved.

Pile burning is generally presumed <u>not</u> to be agricultural open burning because pile burning is seldom integral to the raising of cultivated crops or livestock. Pile burning is typically associated with logging, or with felling of trees which for economic, access or other reasons cannot reasonably be sold. Most logging occurs on forested lands that meet the Regulation No. 9 definition of 'wildlands.'³. These lands are not cultivated since the soil is not disturbed at least every ten years. The Air Division interprets the definition of "wildlands" to exclude cultivation or similar active land management associated with raising of crops. No agricultural exemption is presumed to be appropriate for land that meets the definition of wildlands.

Burning of exotic or other unwanted plants in a wildland context is not assumed to be agricultural open burning: Regulation No. 9's definition of agricultural open burning specifically allows for burning related to weed control. In the Regulation weed control is listed in the context of a larger agricultural purpose. The burning of invasive exotics or other weeds on uncultivated land does not seem to be part of a larger agricultural purpose, and is presumed not to be agricultural open burning.

Most wildlife habitat improvement is presumed not to be an agricultural open burn: Staff have been asked about cases where the owner sells guided hunts on their own land. In most cases, the agricultural exemption does not apply to burning for the purpose of improving wildlife habitat. The Air Division recognizes that commercial operations in which livestock are raised for sale constitute agricultural cultivation activities and burns for the purpose of preparing land for managing livestock are generally exempt from permitting requirements. However, livestock constitute any animals that are purchased or born in captivity, remain confined, and are managed for the purpose of sale or slaughter. Wildlife are not livestock and, with few exceptions in Colorado, belong to the public. If a person needs a license to shoot the animal, the animal is not livestock.

³ 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. Regulation No. 9 § II.V



Appendix A Colorado Statutory and Regulatory References to Agricultural Open Burning

Colorado Revised Statues 25-7-123. Open Burning - penalties

(1) (b) Open burning in the course of agricultural operations may be regulated only where the absence of regulations would substantially impede the commission in carrying out the objectives of this article. In adopting any program applicable to agricultural operations, the commission shall take into consideration the necessity of conducting open burning. For purposes of this section, "agricultural operations" does not include grassland, forest, or habitat management activities of significant users of prescribed fire conducted on lands the primary purpose of which is nonagricultural, unless a person asserts and the commission finds that the absence of regulation would substantially impede the objectives of this article. Such activities shall be deemed "commercial purposes" within the meaning of paragraph (b) of subsection (3) of this section.

<u>Colorado Air Quality Control Commission (AQCC) Regulation No. 9</u> Definitions, Regulation No. 9 \$II

"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." [SII.A]

"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." [SII.M]

"Wildlands

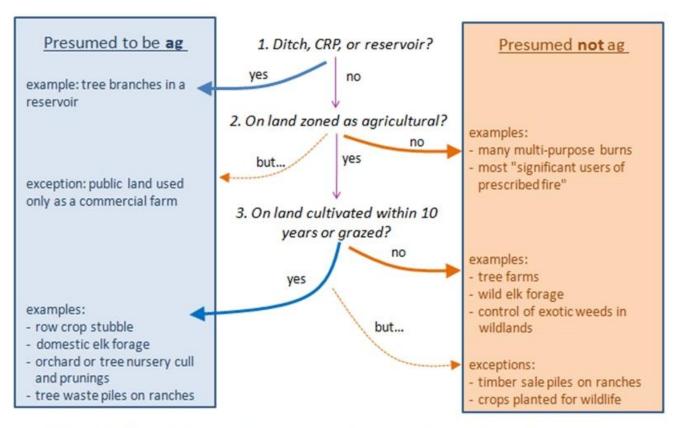
An area where development is generally limited to roads, railroads, power lines and widely scattered structures. The land is not cultivated (i.e., the soil is disturbed less frequently than once in ten years), is not fallow, and is not in the United States Department of Agriculture Conservation Reserve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

Open Burning Permit Requirements, Regulation No. 9, \$III

- "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, 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:...
 - 5. Agricultural open burning"



Appendix B APCD Guidance: Is this burn agricultural open burning?*



This diagram shows APCD's general initial presumptions. Any situation may be considered individually and could be an exception to what is shown here. Please see the full memo for procedures as well as more detail.

