

R307. Environmental Quality, Air Quality.

R307-204. Emission Standards: Smoke Management.

R307-204-1. Purpose and Goals.

(1) The purpose of R307-204 is to establish by rule procedures that mitigate the impacts on air quality and visibility from prescribed fire.

R307-204-2. Applicability.

(1) R307-204 applies to all persons using prescribed fire on land they own or manage.
(2) R307-204 does not apply to agricultural activities specified in 19-2-114 and to those regulated under R307-202, or to activities otherwise permitted under R307.

R307-204-3. Definitions.

The following additional definitions apply only to R307-204.

"Annual Emissions Goal" means the annual establishment of a planned quantitative value of emissions reductions from prescribed fire.

"Best Management Practices" means smoke management and dispersion techniques used during a prescribed fire that affect the direction, duration, height or density of smoke.

"Burn Window" means the period of time during which the prescribed fire is scheduled for ignition.

"Emission Reduction Techniques (ERT)" mean techniques for controlling emissions from prescribed fires to minimize the amount of emission output per unit or acre burned.

"Federal Class I Area" means any Federal land that is federally classified or reclassified Class I.

"Land Manager" means any federal, state, local or private entity that owns, administers, directs, oversees or controls the use of public or private land, including the application of fire to the land.

"Non-burning Alternatives to Fire" means non-burning techniques that are used to achieve a particular land management objective, including but not limited to reduction of fuel loading, manipulation of fuels, enhancement of wildlife habitat, and ecosystem restructuring. These alternatives are designed to replace the use of fire for at least five years.

"Nonfull suppression event" means a naturally ignited wildland fire (wildfire) for which a land manager secures less than full suppression to accomplish a specific prestated resource management objective in a predefined geographic area.

"Particulate Matter" means the liquid or solid particles such as dust, smoke, mist, or smog found in air emissions.

"Pile" means natural materials or debris resulting from some type of fuels management practice that have been relocated either by hand or machinery into a concentrated area.

"Pile Burn" means burning of individual piles.

"Prescribed Fire or Prescribed Burn" means a wildland fire originating from a planned ignition to meet specific objectives identified in a written, approved, prescribed fire plan.

"Prescribed Fire Plan" means the plan required for each fire application ignited by managers. It must be prepared by qualified personnel and approved by the appropriate agency administrator prior to implementation. Each plan follows specific agency direction and must include critical elements described in agency manuals.

"Prescription" means the measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicates other required actions. Prescription criteria may include safety, economic, public health, environmental, geographic, administrative, social, or legal considerations.

"Smoke Sensitive Receptors" means population centers such as towns and villages, campgrounds and trails, hospitals, nursing homes, schools, roads, airports, Class I areas, nonattainment and maintenance areas, areas whose air quality monitoring data indicate pollutant levels that are close to health standards, and any other areas where smoke and air pollutants can adversely affect public health, safety and welfare.

"Wildfire" means unplanned ignition of a wildland fire (such as a fire caused by lightning, volcanoes, unauthorized and accidental human-caused fires) and escaped prescribed fires.

"Wildland" means an area in which development is essentially non-existent, except for pipelines, power lines, roads, railroads, or other transportation or conveyance facilities. Structures, if any, are widely scattered.

"Wildland Fire" means any non-structure fire that occurs in the wildland.

R307-204-4. General Requirements.

(1) Management of On-Going Fires. The land manager shall notify the Division of all wildfires, including nonfull suppression events. If, after consultation with the land manager, the Director determines that a prescribed fire, wildfire, or any smoke transported from other locations, is degrading air quality to levels that could violate the National Ambient Air Quality Standards or burn plan conditions, the land manager shall promptly stop igniting additional prescribed fires.

(2) Non-burning Alternatives to Fire. Each land manager shall submit to the Director annually, by March 15, a list of areas treated using non-burning alternatives to fire during the previous calendar year, including the number of acres, the specific types of alternatives used, and the location of these areas.

(3) Annual Emissions Goal. The Director shall provide an opportunity for an annual meeting with land managers for the purpose of evaluation and adoption of the annual emission goal. The annual emission goal shall be developed in cooperation with states, federal land management agencies and private entities, to control prescribed fire emissions increases to the maximum feasible extent.

(4) Long-term Fire Projections. Each land manager shall provide to the Director by March 15 annually long-term projections of future prescribed fire activity for annual assessment of visibility impairment.

R307-204-5. Burn Schedule.

(1) Any land manager planning prescribed fire burning more than 50 acres per year shall submit a burn schedule to the Director on forms provided by the Division, and shall include the following information for all prescribed fires including those smaller than 20 acres:

- (a) Project name and de minimis status;
 - (b) Latitude and longitude;
 - (c) Acres for the year, fuel type, and planned use of emission reduction techniques to support establishment of the annual emissions goal; and
 - (d) Expected burn dates and burn duration.
- (2) Each land manager shall submit each year's burn schedule no later than March 15 of that year.
- (3) Any land manager who makes changes to the burn schedule shall submit an amendment to the burn schedule within 10 days after the change.

R307-204-6. Small Prescribed Fires (de minimis).

- (1) A prescribed fire that covers less than 20 acres per burn or less than 30,000 cubic feet of piled material shall only be ignited either when the clearing index is 500 or greater or when the clearing index is between 400 and 499, if;
- (a) The prescribed fire is recorded as a de minimis prescribed fire on the annual burn schedule;
 - (b) The land manager obtains approval from the Director by e-mail or phone prior to ignition of the burn; and
 - (c) The land manager submits to the Director hourly photographs, a record of any complaints, hourly meteorological conditions and an hourly description of the smoke plume.

R307-204-7. Large Prescribed Fires.

(1) For a prescribed fire that covers 20 acres or more per burn or 30,000 cubic feet of piled material or more, the land manager shall submit to the Director a prescribed fire plan at least one week before the beginning of the burn window. The plan shall include a prescription and description of other state, county, municipal, or federal resources available on scene, or for contingency purposes.

(2) The land manager shall submit pre-burn information to the Director at least two weeks before the beginning of the burn window. The pre-burn information shall be submitted to the Director on the appropriate form provided by the Division and shall include the following information:

- (a) The project name, total acres, and latitude and longitude;
- (b) Summary of ignition method, burn type, and burn objectives, such as restoration or maintenance of ecological functions or hazardous fuel reduction;
- (c) Any sensitive receptor within 15 miles, including any Class I or nonattainment or maintenance area, and distance and direction in degrees from the project site;
- (d) The smoke dispersion or visibility model used and results;
- (e) The estimated amount of total particulate matter anticipated;
- (f) A description of how the public and land managers in neighboring states will be notified;
- (g) A map depicting both the daytime and nighttime smoke path and down-drainage flow for a minimum of 15 miles from the burn site with smoke-sensitive areas delineated;
- (h) Safety and contingency plans for addressing any smoke intrusions;
- (i) Planned use of emission reduction techniques to support establishment of an annual emissions goal, if not already submitted under R307-204-5; and
- (j) Any other information needed by the Director for smoke management purposes, or for assessment of contribution to visibility impairment in any Class I area.

(3) Burn Request.

(a) The land manager shall submit to the Director a burn request on the form provided by the Division by 1000 hours at least two business days before the planned ignition time. The form must include the following information:

- (i) The project name;
- (ii) The date submitted and by whom;
- (iii) The burn manager conducting the burn and phone numbers; and
- (iv) The dates of the requested burn window.

(b) No large prescribed fire shall be ignited before the Director approves the burn request.

(c) If a prescribed fire is delayed, changed or not completed following burn approval, any significant changes in the burn plan shall be submitted to the Director before the burn request is submitted.

(4) Daily Emissions Report. By 0800 hours on the day following the prescribed fire, for each day of prescribed fire activity covering 20 acres or more, the land manager shall submit to the Director a daily emission report on the form provided by the Division including the following information:

- (a) Project name;
- (b) The date submitted and by whom;
- (c) The start and end dates and times of the burn;

(d) Emission information, to include total affected acres, black acres, tons fuel consumed per acre, and tons particulate matter produced;

(e) Public interest regarding smoke;

(f) Daytime smoke behavior;

(g) Nighttime smoke behavior;

(h) Emission reduction techniques applied; and

(i) Evaluation of the techniques used by the land manager to reduce emissions or manage the smoke from the prescribed burn.

(5) Emission Reduction and Dispersion Techniques. Each land manager shall take measures to prevent smoke impacts. Such measures may include best management practices such as dilution, emission reduction or avoidance in addition to others described in the pre-burn information form provided by the Division. An evaluation of the techniques shall be included in the daily emissions report required by (4) above.

(6) Monitoring. Land managers shall monitor the effects of the prescribed fire on smoke sensitive receptors and on visibility in Class I areas, as directed by the burn plan. Hourly visual monitoring and documentation of the direction of the smoke plume shall be recorded on the form provided by the Division or on the land manager's equivalent form. Complaints from the public shall be noted in the land managers project file. Records shall be available for inspection by the Director for six months following the end of the fire.

KEY: air quality, prescribed fire, smoke

Date of Enactment or Last Substantive Amendment: September 5, 2019

Notice of Continuation: December 9, 2019

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)