

R307. Environmental Quality, Air Quality.**R307-204. Emission Standards: Smoke Management.****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 or a wildland fire use event that affect the direction, duration, height or density of smoke.

"Burn 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.

"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.

"Fire 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.

"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 the next five years.

"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 any fire ignited by management actions to meet specific objectives, such as achieving resource benefits.

"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.

"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, other than prescribed fire, that occurs in the wildland.

"Wildland Fire Use Event" means naturally ignited wildland fire that is managed to accomplish specific pre-stated resource management objectives in predefined geographic areas.

"Wildland Fire Implementation Plan(WFIP)" means the plan required for each fire that is allowed to burn.

"WFIP Stage I" means the initial wildland fire strategy planning document. It is developed for fires less than 20 acres, with a low potential of spread and negative impacts. It must be completed within 8-hrs. of start.

"WFIP Stage II" means a more detailed wildland fire strategy planning document. It is developed for fires greater than 20 acres that are more active fires with a greater potential for geographic extent. It must be completed within 24-hrs. of start.

R307-204-5. Burn Schedule.

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

(a) Project number and project name;
(b) Air Quality Basin, UTM coordinate for the central point of the prescribed fire, project elevation, and county;

(c) Total project acres, description of major fuels, type of burn, ignition method, and planned use of emission reduction techniques to support establishment of the annual emissions goal;

(d) Earliest burn date 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 shall be ignited only when the clearing index is 500 or greater.

(2) A prescribed fire that covers less than 20 acres per day may be ignited when the National Weather Service Clearing Index is between 500 and 400 with approval of the executive secretary.

(a) The prescribed fire should be recorded as a *de minimis* prescribed fire on the Utah Annual Burn Schedule.

(b) The Land Manager is required to notify the executive secretary by fax, e-mail, or phone prior to ignition of the burn when burning below a National Weather Service Clearing Index is between 500 and 400.

(c) The land manager must include hourly photographs, a record of any complaints, hourly meteorological conditions and an hourly description of the smoke plume must be recorded and submitted.

R307-204-7. Small Prescribed Pile Fires (*de minimis*).

(1) Pile burns covering up to 30,000 cubic feet per day shall be ignited only when the clearing index is 500 or greater.

(2) Pile burns covering up to 30,000 cubic feet per day may be ignited when the National Weather Service Clearing Index is between 500 and 400 with approval of the executive secretary.

(a) The pile fire should be recorded as a *de minimis* prescribed fire on the Utah Annual Burn Schedule.

(b) The Land Manager is required to notify the executive secretary by fax, e-mail, or phone prior to ignition of the burn when burning below a National Weather Service Clearing Index is between 500 and 400.

(c) The land manager must include hourly photographs, a record of any complaints, hourly meteorological conditions and an hourly description of the smoke plume must be recorded and submitted.

R307-204-8. Large Prescribed Fires.

(1) Burn Plan. For a prescribed fire that covers 20 acres or more per burn, the land manager shall submit to the executive secretary a burn plan, including a fire prescription.

(2) Pre-Burn Information. For a prescribed fire that covers 20 acres or more per burn, the land manager shall submit pre-burn information to the executive secretary at least two weeks before the beginning of the burn window. The pre-burn information shall be submitted to the executive secretary on the appropriate form provided by the Division of Air Quality by fax, electronic mail or postal mail and shall include the following information:

(a) The three-letter ID, project number, date submitted, name of person submitting the form, burn manager, and phone numbers;

(b) Summary of burn objectives, such as restoration or maintenance of ecological functions or indication of fire resiliency;

(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) Planned mitigation methods;

(e) The smoke dispersion or visibility model used and results;

(f) The estimated amount of total particulate matter anticipated;

(g) A description of how the public and land managers in neighboring states will be notified;

(h) 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;

(i) Safety and contingency plans for addressing any smoke intrusions; and

(j) If the fire is in a nonattainment or maintenance area and is subject to general conformity (42 U.S.C. 7506(c)), a copy of the conformity demonstration showing that the fire meets the requirements of the Clean Air Act and conforms with the applicable State Implementation Plan.

(k) Planned use of emission reduction techniques to support establishment of an annual emissions goal, if not already submitted under R307-204-5.

(l) Any other information needed by the executive secretary 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 executive secretary a burn request on the form provided by the Division of Air Quality by 1000 hours at least two business days before the planned ignition time. The form may be submitted by fax or electronic mail, and must include the following information:

(i) The three-letter identification and project number consistent with the annual burn schedule required in R307-204-5(1) above;

(ii) The date submitted and by whom; and

(iii) The burn manager conducting the burn and phone numbers.

(b) No prescribed fire requiring a burn plan shall be ignited before the executive secretary 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 executive secretary before the burn request is submitted. If a prescribed fire is not carried out, the land manager shall list the reasons on the burn request form provided by the Division of Air Quality and shall submit the form by fax or electronic mail to the executive secretary by 0800 hours the following business day.

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

(a) The three-letter identification and project number consistent with the annual burn schedule required in R307-204-5(1) above;

(b) The date submitted and by whom;

(c) The start and end dates and times of the burn;

(d) Emission information including black acres, tons fuel consumed per acre, and tons particulate matter produced;

(e) Public interest regarding smoke;

(f) Daytime ventilation;

(g) Nighttime smoke behavior;
 (h) Evaluation of the techniques used by the land manager to reduce emissions or manage the smoke from the prescribed burn; and

(i) Emission reduction techniques applied.

(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 of Air Quality. 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 of Air Quality 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 executive secretary for six months following the end of the fire.

R307-204-9. Large Prescribed Pile Fires.

(1) Burn Plan. For a prescribed pile fire that exceeds 30,000 cubic feet per day, the land manager shall submit to the executive secretary a burn plan, including a fire prescription.

(2) Pre-Burn Information. For a prescribed pile fire that exceeds 30,000 cubic feet or more per burn, the land manager shall submit pre-burn information to the executive secretary at least two weeks before the beginning of the burn window. The pre-burn information shall be submitted to the executive secretary on the appropriate form provided by the Division of Air Quality by fax, electronic mail or postal mail and shall include the following information:

(a) The three-letter ID, project number, date submitted, name of person submitting the form, burn manager, and phone numbers;

(b) Summary of burn objectives, such as restoration or maintenance of ecological functions or indication of fire resiliency;

(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) Planned mitigation methods;

(e) The smoke dispersion or visibility model used and results;

(f) The estimated amount of total particulate matter anticipated;

(g) A description of how the public and land managers in neighboring states will be notified;

(h) 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;

(i) Safety and contingency plans for addressing any smoke intrusions; and

(j) If the fire is in a nonattainment or maintenance area and is subject to general conformity (42 U.S.C. 7506(c)), a copy of the conformity demonstration showing that the fire meets the requirements of the Clean Air Act and conforms with the applicable State Implementation Plan.

(k) Planned use of emission reduction techniques to support establishment of an annual emissions goal, if not already submitted under R307-204-5.

(l) Any other information needed by the executive secretary 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 executive secretary a burn request on the form provided by the Division of Air Quality by 1000 hours at least two business days before the planned ignition time. The form may be submitted by fax or electronic mail, and must include the following information:

(i) The three-letter identification and project number consistent with the annual burn schedule required in R307-204-5(1) above;

(ii) The date submitted and by whom; and

(iii) The burn manager conducting the burn and phone numbers.

(b) No prescribed pile fire requiring a burn plan shall be ignited before the executive secretary approves the burn request.

(c) If a prescribed pile fire is delayed, changed or not completed following burn approval, any significant changes in the burn plan shall be submitted to the executive secretary before the burn request is submitted. If a prescribed fire is not carried out, the land manager shall list the reasons on the burn request form provided by the Division of Air Quality and shall submit the form by fax or electronic mail to the executive secretary by 0800 hours the following business day.

(4) Daily Emissions Report. By 0800 hours on the day following the prescribed pile burn, for each day of pile fire activity exceeding 30,000 cubic feet, the land manager shall submit to the executive secretary a daily emission report on the form provided by the Division of Air Quality including the following information:

(a) The three-letter identification and project number consistent with the annual burn schedule required in R307-204-5(1) above;

(b) The date submitted and by whom;

(c) The start and end dates and times of the burn;

(d) Emission information including black acres, tons fuel consumed per acre, and tons particulate matter produced;

(e) Public interest regarding smoke;

(f) Daytime ventilation;

(g) Nighttime smoke behavior;

(h) Evaluation of the techniques used by the land manager to reduce emissions or manage the smoke from the prescribed pile burn; and

(i) Emission reduction techniques applied.

(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 of Air Quality. 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 pile 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 of Air Quality 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 executive secretary for six months following the end of the fire.

R307-204-10. Requirements for Wildland Fire Use Events.

(1) Burn Approval Required.

(a) The land manager shall notify the executive secretary of any potential wildland fire use (WFU) event having a WFIP Stage I. The following information will be provided:

- (i) UTM coordinate of the fire;
- (ii) Active burning acres;
- (iii) Probable fire size and daily anticipated growth in acres;
- (iv) Types of wildland fuel involved;
- (v) An emergency telephone number that is answered 24 hours a day;
- (vi) Wilderness or Resource Natural Area designation, if applicable;
- (vii) Distance to nearest community;
- (viii) Elevation of fire; and
- (ix) Fire's airshed number.

(b) The Land Managers shall notify the executive secretary of any potential wildland fire use event covering more than 20 acres or having a WFIP Stage II due to higher potential for spread and negative impacts. In addition to the information required for a WFU with a WFIP Stage I, the following additional information will be provided to the executive secretary as it is being developed:

- (i) WFIP Stage II wildland fire implementation plan and anticipated emissions;
- (ii) 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; and
- (iii) Additional computer smoke modeling, if requested by the executive secretary.

(c) The executive secretary's approval of the smoke management element of the wildland fire implementation plan shall be obtained before managing the fire as a wildland fire use event.

(2) Daily Emission Report for wildland fire use event. By 0800 hours on the business day following fire activity covering 20 acres or more, the land manager shall submit to the executive secretary the daily emission report on the form provided by the Division of Air Quality, including the following information:

- (a) The three-letter identification, project number, Air Quality Basin, and name of the burn manager;
- (b) UTM coordinate;
- (c) Dates and times of the start and end of the burn;
- (d) Black acres by wildland fuel type;
- (e) Estimated proportion of wildland fuel consumed by wildland fuel type;
- (f) Proportion of moisture in the wildland fuel by size class;
- (g) Emission estimates;
- (h) Level of public interest or concern regarding smoke; and
- (i) Conformance to the wildland fire implementation plan.

(3) Monitoring. The land manager shall monitor the effects of smoke on smoke sensitive receptors and visibility in Class I areas as directed by the wildland fire implementation plan. Complaints from the public shall be recorded in the project file. Records shall be available for inspection by the executive secretary for six months following the end of the fire.

KEY: air quality, wildland fire, smoke, land manager

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NOTICES OF RULE EFFECTIVE DATES

No. 34825 (AMD): R277-613. School District and Charter School Bullying and Hazing Policies and Training
Published: 06/01/2011
Effective: 07/11/2011

No. 34826 (NEW): R277-706. Public Education Regional Service Centers
Published: 06/01/2011
Effective: 07/11/2011

No. 34829 (REP): R277-710. International Baccalaureate Programs
Published: 06/01/2011
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No. 34830 (REP): R277-711. Educational Programs for Gifted and Talented Students
Published: 06/01/2011
Effective: 07/11/2011

No. 34831 (REP): R277-712. Advanced Placement Programs
Published: 06/01/2011
Effective: 07/11/2011

No. 34827 (AMD): R277-713. Concurrent Enrollment of High School Students in College Courses
Published: 06/01/2011
Effective: 07/11/2011

No. 34832 (REP): R277-715. English Language Learner Family Literacy Centers
Published: 06/01/2011
Effective: 07/11/2011

No. 34833 (REP): R277-717. Mathematics, Engineering, Science Achievement (MESA)
Published: 06/01/2011
Effective: 07/11/2011

No. 34834 (REP): R277-760. Flow Through Funds for Students at Risk
Published: 06/01/2011
Effective: 07/11/2011

Environmental Quality

Air Quality
No. 34682 (R&R): R307-103. Administrative Procedures
Published: 05/01/2011
Effective: 08/29/2011

No. 34689 (AMD): R307-120-8. Appeal and Revocation
Published: 05/01/2011
Effective: 08/29/2011

No. 34559 (AMD): R307-204. Emission Standards: Smoke Management
Published: 05/01/2011
Effective: 07/07/2011

Drinking Water
No. 34696 (R&R): R309-115. Administrative Procedures
Published: 05/01/2011
Effective: 08/29/2011

Environmental Response and Remediation
No. 34698 (AMD): R311-201-9. Revocation of Certification
Published: 05/01/2011
Effective: 08/29/2011

No. 34699 (R&R): R311-210. Administrative Procedures for Underground Storage Tank Act Adjudicative Proceedings
Published: 05/01/2011
Effective: 08/29/2011

No. 34700 (AMD): R311-500-9. Denial of Application and Revocation of Certification
Published: 05/01/2011
Effective: 08/29/2011

Solid and Hazardous Waste
No. 34701 (AMD): R315-2-14. Violations, Orders, and Hearings
Published: 05/01/2011
Effective: 08/29/2011

No. 34702 (R&R): R315-12. Administrative Procedures
Published: 05/01/2011
Effective: 08/29/2011

Water Quality
No. 34697 (R&R): R317-9. Administrative Procedures
Published: 05/01/2011
Effective: 08/29/2011

Health

Administration
No. 34497 (AMD): R380-70-6. Electronic Data Interchange Standards
Published: 04/01/2011
Effective: 07/05/2011

Human Services

Substance Abuse and Mental Health
No. 34726 (AMD): R523-20-11. Division Rules of Administration
Published: 05/15/2011
Effective: 07/12/2011