

NOTICES OF FINAL RULEMAKING

The Administrative Procedure Act requires the publication of the final rules of the state's agencies. Final rules are those which have appeared in the *Register* first as proposed rules and have been through the formal rulemaking process including approval by the Governor's Regulatory Review Council or the Attorney General. The Secretary of State shall publish the notice along with the Preamble and the full text in the next available issue of the *Register* after the final rules have been submitted for filing and publication.

NOTICE OF FINAL RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY AIR POLLUTION CONTROL

PREAMBLE

1. Sections Affected

R18-2-602
R18-2-1501
R18-2-1502
R18-2-1503
R18-2-1504
R18-2-1505
R18-2-1506
R18-2-1507
R18-2-1508
R18-2-1509
R18-2-1510
R18-2-1510
R18-2-1511
R18-2-1511
R18-2-1512
R18-2-1512
R18-2-1513
R18-2-1513
R18-2-1514
R18-2-1514
R18-2-1514
R18-2-1515

Rulemaking Action

Amend
Re-number
New Section
Re-number
Amend
Re-number
Amend
Re-number
Amend
Repeal
Re-number
Amend
Amend

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 49-414, 49-414.01, and 49-425

Implementing statute: A.R.S. § 49-501

3. The effective date of the rules:

March 16, 2004

4. A list of all previous notices appearing in the Register addressing the final rules:

Notice of Rulemaking Docket Opening: 9 A.A.R. 3386, August 1, 2003

Notice of Proposed Rulemaking: 9 A.A.R. 4066, September 19, 2003

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Kevin Force

Address: Arizona Department of Environmental Quality
1110 W. Washington
Phoenix, AZ 85007

Telephone: (602) 771-4480 (This number may be reached in state by dialing 1-800-234-5677 and requesting the seven digit number.)

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6. An explanation of the rules, including the agency's reasons for initiating the rules:

Summary. This final rule amends Arizona's existing open burning and prescribed burning rules to make them conform to EPA requirements for states' Regional Haze State Implementation Plans. In addition, these amendments make other technical changes, including improvements of the rules' clarity, conciseness, and understandability.

Regional Haze SIP Requirements. The revisions to R18-2-602 and Article 15 will allow the state's Regional Haze SIP (that Arizona is required to submit to EPA by December 31, 2003) to meet the approvability test (40 CFR 51.309(c)). The specific requirements for state regional haze SIPs are found at 40 CFR 51.308 and 51.309.

Under 40 CFR 51.309(d)(6), *Programs Related to Fire*, the plan must provide for:

“(i) Documentation that all Federal, State, and private prescribed fire programs within the State evaluate and address the degree visibility impairment from smoke in their planning and application. In addition the plan must include smoke management programs that include all necessary components including, but not limited to, actions to minimize emissions, evaluation of smoke dispersion, alternatives to fire, public notification, air quality monitoring, surveillance and enforcement, and program evaluation.

(ii) A statewide inventory and emissions tracking system (spatial and temporal) of VOC, NOX, elemental and organic carbon, and fine particle emissions from fire. In reporting and tracking emissions from fire from within the State, States may use information from regional data-gathering and tracking initiatives.

(iii) Identification and removal wherever feasible of any administrative barriers to the use of alternatives to burning in Federal, State, and private prescribed fire programs within the State.

(iv) Enhanced smoke management programs for fire that consider visibility effects, not only health and nuisance objectives, and that are based on the criteria of efficiency, economics, law, emission reduction opportunities, land management objectives, and reduction of visibility impact.

(v) Establishment of annual emission goals for fire, excluding wildfire, that will minimize emission increases from fire to the maximum extent feasible and that are established in cooperation with States, tribes, Federal land management agencies, and private entities.”

In early 2002, ADEQ's Regional Haze stakeholders established a Fire Emissions Work Group (FEWG) to discuss visibility issues related to fire emissions and make recommendations to ADEQ for the Regional Haze SIP. Fifteen stakeholders, representing public and private entities in geographically diverse areas of the state, agreed to participate in the work group.

The FEWG held a series of meetings from June 2002 through May 2003 to learn about and discuss options for all categories of burning activities that occur in the state. The draft rules were presented at public workshops in Casa Grande, Flagstaff, Phoenix, Show Low, and Yuma from April 10-17, 2003. The extensive meeting schedule was proposed by work group members in order to provide local access to the rulemaking process and obtain early input from sectors of the community who would be most affected by these rules. The current final rule is a joint effort of ADEQ and the FEWG based on input received at those public meetings and the decisions of the FEWG.

Structure of open burning authority in Arizona. A.R.S. § 49-425 provides ADEQ with general air quality rule authority, including authority to promulgate rules for open burning permits. It requires the Director to adopt rules determined necessary and feasible “to reduce the release into the atmosphere of air contaminants originating within the territorial limits of the state.” A.R.S. § 49-501 adds related authority by excepting from its provisions those open outdoor fires that are permitted by any rule issued pursuant to A.R.S. § 49-425 (see subsections (C)(5)), and in (E), by allowing the director to delegate authority to issue open burn permits to a “county, city, town, or fire district.” A.R.S. § 49-414.01(A) sets forth regional haze goals and requires the Director to submit a plan to EPA that addresses “programs related to emissions from fire sources” “as necessary to submit an approvable plan” and authorizes rules necessary for the revisions to the state implementation that address regional haze.

R18-2-602 and A.R.S. § 49-501 govern open burning activities under ADEQ's jurisdiction. A.R.S. § 49-501 was last amended in 1997. In 1996, the delegation subsection (E) was added. In 1994, the general permit for household waste was added. Based on the statute and rule, ADEQ published guidelines on open burning in February 1997.

Open Burning Revisions

At the public meetings mentioned above, the three frequent topics for comment were: time-of-day burning restrictions in R18-2-602(D)(3), permitting requirements for air curtain destructors, and the relationship of the state rule to counties that have independent authority to permit fires. However, in the public comment period, most commenters mentioned ADEQ's proposed inclusion of fire training in those permits that would require an open burn permit. ADEQ has returned fire training to those fires that are exempted from an open burning permit. The issue is discussed in more detail in item #11 of this preamble.

Compared to the existing rule, this final rule contains a number of additional definitions in a separate subsection. ADEQ has finalized definitions for various categories of open burning, such as agricultural, construction, and residential. In addition, there are new definitions for “delegated authority,” “independent authority to permit fires,” and “prohibited materials.” Prohibited materials were previously described in the February '97 guidelines. By placing all

of the necessary material from the guidelines in the final rule, ADEQ intends that this amended R18-2-602 will replace the guidelines as of the effective date of the rule.

The final rule also clarifies which open burning activities require open burning permits and those that are exempt from a permit. The final rule contains a more complete list of information that is required to be in the permit. This is both for more efficient permit administration, and to comply with various aspects of the regional haze rule.

ADEQ considered exempting certain fires using air curtain destructors from the open burn permit requirement in order to remove an administrative barrier to this type of burning. The Regional Haze Rule requires that administrative barriers to the use of alternatives to burning be removed wherever feasible. (See 40 CFR 51.309(d)(6)(iii)) ADEQ considered a barrier to a burning method with arguably lower emissions in the same way. Air curtain destructors (ACDs) are basically incinerators with high velocity air blown across and into the upper portion of the combustion chamber. This curtain of air traps particulates (smoke) and oxygenates the chamber, resulting in better combustion and less smoke. After reviewing two studies and considering the comments, ADEQ has remained with its conclusion that these devices do require oversight and it is appropriate that they be subject to permits under the rule. ADEQ does not view the requirement that ACDs obtain an open burning permit as much of an administrative barrier. ADEQ also notes that certain air curtain destructors are subject to New Source Performance Standards (see 40 CFR 60, subparts CCCC and DDDD). The issue is discussed in more detail in item #11 of this preamble. Studies reviewed by ADEQ relevant to air curtain destructors are listed in item #7 of this preamble.

ADEQ has added language in the final rule clarifying that the state rule will not operate in counties with independent authority to permit fires, and has listed the three counties in the definition. This independent authority is derived in part from language in A.R.S. § 49-501(C)(5) specifying that fires permitted pursuant to county rules are excepted from A.R.S. § 49-501. The three counties referenced in the definition all have rules creating permits for open outdoor fires, other than dangerous materials. (See Maricopa County Rule 341; Pima County Rule 17.12.480, et seq.; Pinal County Rule 3-8-700 and 3-8-710.) Pursuant to A.R.S. § 49-501(G) and the current Phoenix area PM₁₀ SIP, the Maricopa County rule prohibits burning of household waste.

The final rule also clarifies provisions on burning of dangerous materials and household waste. Finally, new restrictions on permits issued by delegated authorities that minimize the potential for conflict of interest on the part of delegated authorities have been included in subsection (G). First, the final rule specifies that a delegated authority may not issue itself open burning permits. Second, the rule prohibits private fire protection providers from conditioning the issuance of open burning permits on the applicant being their customer.

Final Prescribed Burning Revisions

State and federal forest and range land make up more than half of the land in Arizona. Despite potential air quality concerns, state and federal land managers (F/SLMs) use fire as a resource management tool on this land for a variety of purposes. Article 15 governs those fires that are set or allowed to burn on these lands in Arizona from a general air quality perspective. The two primary air quality concerns are violations of national ambient air quality standards (NAAQS) for particulates and visibility impairment. Research indicates that, on average, 90 percent of smoke particles from wildland and prescribed fires are PM₁₀, and 10 percent are PM_{2.5}. Arizona's Prescribed Burning requirements in Article 15 address these air quality concerns, primarily through efforts to ensure the best times for "burns" and by promoting other techniques to reduce the amount of smoke produced and the effects of that smoke.

A.R.S. § 49-414.01 specifically requires the Director to submit a plan to EPA, and allows ADEQ to promulgate rules addressing programs related to emissions from wildland fire, including prescribed fires and wildfires (see A.R.S. § 49-414.01(A)(7)). The final revisions to Article 15 of the Code, which govern the procedures relating to prescribed and wildland fires, will better conform to EPA's regional haze requirements, be more understandable, and facilitate enhanced compliance. Most of the final changes to Article 15 directly reflect the mandates of the EPA's regional haze rule requirements, particularly those relating to the collection and recording of burn data, the evaluation of burn programs and setting of annual emission goals. The former structure of the rule remains intact: 1) Annual registration; 2) submittal of a Burn Plan at least 14 days before the burn; 3) a daily Burn Request; and 4) a Burn Accomplishment Form.

Section by Section Explanation of significant final changes.

Article 6

R18-2-602 This rule describes the process by which permits may be issued for open burns, and identifies open burning activities that are exempt from the permit requirement.

Article 15

R18-2-1501 This Section lists the definitions applicable to Article 15. In response to the EPA regulation, there are new definitions for "Annual Emissions Goal," and "non-burning alternatives to fire." In addition, "Best Management Practices" has been replaced by "Smoke management techniques" and "Emission reduction techniques," and "Prescribed natural fire" has been replaced by "Wildland fire use."

Notices of Final Rulemaking

- R18-2-1502 This Section limits the applicability of the rule to state and federal land managers, while excluding Indian Trust lands. The final change clarifies that private burners, such as the Nature Conservancy, may also be subject to the Article.
- R18-2-1503 This Section describes the process by which land managers annually register their planned burns with ADEQ. The final changes incorporate emission reduction techniques and non-burning alternatives to fire and facilitate the setting of annual emission goals. A new annual period and other clarifying changes have been included.
- R18-2-1504 This Section requires the details of each burn to be included in the Burn Plan form to be submitted to ADEQ 14 days before requesting permission to ignite. The final changes clarify the process and supplement the information related to it.
- R18-2-1505 This Section requires land managers to submit a daily burn request for each day of the burn and describes optional agency response to the request. The final changes are primarily clarifying.
- R18-2-1506 This Section describes how the agency will determine whether and how much burning to allow. The final changes also add clarifying factors not directly related to regional haze.
- R18-2-1507 This Section requires land managers to report acreage and fuel types burned, the emission reduction and smoke management techniques used, and requires ADEQ to keep records of this information. A subsection has been added for wildfire reporting to allow those fires' emissions to be entered into the regional haze emission tracking system.
- R18-2-1508 This Section describes how land managers shall inform the agency of wildfires and seek permission for wildland burn uses. Clarifications have been included based on recent experiences with wildfires.
- R18-2-1509 This Section replaces the former BMP section and describes Emission Reduction Techniques, many of which were listed previously as BMPs. It requires land managers to use as many as feasible.
- R18-2-1510 This Section also replaces the former BMP section and describes Smoke Management Techniques, some of which were listed previously as BMPs. It requires land managers to use as many as feasible.
- R18-2-1511 This Section describes how the agency may require land managers to monitor aspects of their prescribed burns and wildland burn uses. The final changes are clarifications and minor changes to weather and air quality monitoring.
- R18-2-1512 This Section requires all burn projects to be conducted by personnel trained in prescribed fire and smoke management techniques. The final changes are clarifications.
- R18-2-1513 This Section directs the agency to conduct burn-related public awareness programs and make burn information available to the public. The final changes attempt to promote regional coordination.
- R18-2-1514 This Section describes how the agency may inspect, verify, and audit burn information, and actions the agency may take regarding enforcement.
- R18-2-1514(former) In a recent five-year review report, ADEQ stated that it would reevaluate the need for this Section. ADEQ is deleting subsection (B) because the changes in R18-2-1503 provide for a more efficient and effective system. Subsection (A) has been moved to R18-2-1511(B).
- R18-2-1515 This Section directs the agency to make its forms and data relating to prescribed burns and wildland burn uses available in an electronic format. The final changes are clarifying only.

7. A reference to any study relevant to the rules that the agency reviewed and either relied on in its evaluation of or justification for the rules or did not rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

The Use of Air Curtain Destructors for Fuel Reduction, Alan R. Shapiro, United States Department of Agriculture, Forest Service Technology and Development Program (September 2002).

Reducing PM2.5 Emissions Through Technology, Evaluations of the Effectiveness of an Air Curtain Incinerator, Ronald A. Scott, Ronald Babbitt, Emily Lincoln, and Wei Min Hao, USDA Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, Missoula, MT (October 2002).

Studies available for review at the ADEQ Library, 1110 W. Washington, 1st Floor, Phoenix, AZ 85007.

8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

A. Rule Identification

The sixteen rules amended in this rulemaking are R18-2-602, "Unlawful Open Burning," and Article 15, "Forest and Range Management Burns," R18-2-1501 through R18-2-1515.

B. Entities Affected by R18-2-602, "Unlawful Open Burning"

Open burning may be done by many entities for a variety of purposes, such as waste disposal, weed control, site preparation, disease and pest prevention, resource management, and training and fire prevention. Unless specifically exempted by this rule, persons setting outdoor fires would have to obtain a permit from ADEQ or a delegated authority, a city or fire district, or one of the three counties with independent authority to issue permits (Maricopa, Pima, Pinal). Persons who might be subject to this final rule therefore include: (1) individuals; (2) businesses, such as farms, ranches, orchards, electric generating plants, construction and mines; (3) federal sources, such as military installations; (4) state agencies, such as the Departments of Transportation and Corrections; and (5) political subdivisions, such as counties, cities, irrigation districts, and fire districts.

ADEQ has delegated authority to issue permits to about 50 fire departments, fire districts and cities or towns located in 9 of Arizona's 15 counties. Authority to issue permits in Graham County is delegated to Graham County Health Department, while Maricopa, Pima and Pinal Counties have independent authority to permit fires. ADEQ has jurisdiction to issue permits in areas outside the delegated authorities' jurisdiction in these counties. ADEQ typically issues more than 100 open burning permits annually to a wide variety of permittees, most of which are for burns in Gila and Cochise Counties. Permits for burns in LaPaz, Yavapai, Santa Cruz, Apache, Greenlee, and Coconino Counties are also common.

The following represents a sampling of the level of permits issued by delegated authorities based on the calendar year 2002. The City of Prescott in Yavapai County issued about 200 permits in 2002, of which the majority was for residential burning. The City of Yuma issued 15 open burning permits, mainly for agriculture. Rural Metro Fire Department, which has jurisdiction outside of the municipalities of Somerton and Yuma, typically issues 300-400 residential open burning permits and 50-60 permits for agriculture in Yuma County. The City of Payson in Gila County issued 146 open burning permits for brush and weeds. Bullhead City in Mohave County annually issues 50-70 open burning permits of which the majority is for residential burning. The 384 open burning permits issued by Graham County Health Department in fiscal year 2003 were all for purposes of weed abatement.

C. Potential Impact of R18-2-602

This rulemaking only makes minor changes and incorporates current practice, therefore ADEQ expects the rule to create minimal actual impact, such as the costs associated with minor changes in recordkeeping, documentation, and reporting requirements. ADEQ and delegated authorities will have to maintain copies of effective permits, as well as prepare annual reports for submission to ADEQ. While some of these changes will generate minimal costs, ADEQ expects the overall benefits to exceed those costs. It should also be noted that ADEQ does not charge fees for open burning permits because most permits are issued in a day or two and it would require minimal administrative effort.

D. Entities Affected by Article 15, "Forest and Range Management Burns"

Since ADEQ has jurisdiction, outside tribal lands, over air pollution resulting from prescribed burning, this rule will impact the following federal and state agencies that do burning: (1) Federal Land Managers (FLMs) involved in burning activities, such as U.S. Forest Service, U.S. Fish and Wildlife Service, National Parks Service, Bureau of Land Management, Bureau of Reclamation, Department of Defense; and (2) State Land Managers (SLMs), such as Arizona State Land Department, Arizona Department of Transportation, Arizona Department of Game and Fish, and Parks Department. Additionally, there are entities not actually subject to this rule but who may voluntarily comply with some or all of the rule provisions, such as the Bureau of Indian Affairs, one of the largest burners in Arizona. Also, private land managers, such as The Nature Conservancy, or individuals, might also need to comply with this rule or request assistance from one of the F/SLMs.

Each year, ADEQ receives more than 1,000 daily burn requests from F/SLMs. For example, in calendar year 2002, about 1,400 requests to burn were received, and slightly more than 104,000 acres were burned, which represents about 56 percent of the total acres approved to burn. This figure is approximately equal to the number of acres burned each year for the past ten years (106,429) on federal, state, and tribal lands. The major fuel types burned in 2002 and their relative proportions include: piled ponderosa pine (22%), non-piled ponderosa pine (21%), and natural ponderosa pine (17%). The remaining 40% of fuel types include: natural shrub, non-piled grass and ponderosa pine, natural grass, natural grass and ponderosa pine, non-piled mixed, and other.

For comparison, in 1999, F/SLMs requested nearly 450,000 acres to burn. Although ADEQ approved close to 80 percent of the requested acreage, the actual number of acres burned was about 200,000. The fuel types burned in 1999 were: broadcast slash (32%), ponderosa pine (22%), grass (20%), slash piles (14%), brush (10%), and pinyon juniper (2%). As shown with these two years, proportions, however, vary from one year to another.

Combining acres burned for 1994 through 1999 shows the percentage of acres burned by F/SLMs agencies: U.S. Forest Service (49%), Bureau of Indian Affairs (30%), National Park Service (7%), Bureau of Land Management (7%), U.S. Fish and Wildlife (6%), Arizona State Land Department (1%), and other (1%).

Notices of Final Rulemaking

E. Potential Impact of Article 15

Because this rule involves forest and range management burning by federal and state land managers, private persons, political subdivisions of the state, and small businesses will not bear any direct incremental costs from the final rule changes. However, because the rule requires both better tracking of emissions, better management of smoke, and public education and notification, benefits are expected to accrue to the public, particularly to populations living close to the burns. Specifically, there is potential for incremental benefits arising from better planning and implementation of measures which increase burn efficiency, prevent wildfires, improve visibility, and reduce smoke impacts to both the general public and more sensitive segments of the population.

F/SLMs currently pay for two full-time positions to work with ADEQ at an estimated annual value of \$120,000 at ADEQ. Office space and equipment are provided by ADEQ. ADEQ currently supports one full-time position for the smoke management program. Although implementing this amended rule may require minimally increased planning and evaluation time, ADEQ does not expect to need additional employees to handle the workload. This increased workload, together with administrative costs associated with making burn information publicly available and conducting public awareness programs, are all that comprise the incremental impact to ADEQ. Thus, ADEQ judges that the costs to the agency are minimal.

The incremental impact of the changes to Article 15 is based on the rule's new requirements, and are expected to result in minimal economic impact to F/SLMs and ADEQ. For example, F/SLMs will have to provide more information about their prescribed burns, including emission reduction techniques and non-burning alternatives. They will also be encouraged to attend annual meetings for program evaluation and the establishment of annual emissions goals, and will be looked to for the development of long-term projections of future prescribed fire and wildland fire use activities. The information provided by F/SLMS will be used by ADEQ to assess visibility impairment and other air quality concerns. Additional compliance costs include those associated with the incorporation of additional emission reduction and smoke management techniques.

Together, these rule changes are expected to improve the state's smoke management program, which could lead to improvements in air quality through reduction and better management of burns. Evidence shows that exposure to criteria pollutants, either to individual pollutants such as particulate matter (PM), or collectively to a variety of pollutants, is associated with increased mortality. The positive correlation is most closely related to ambient air concentrations of PM. Human health effects of PM, for example, include premature mortality, bronchitis, new asthma cases and exacerbated asthma in existing individuals, increased hospital admissions, lower and upper respiratory illness, shortness of breath, respiratory symptoms, restricted activity days, and lost days of work. Other health effects ascribed to exposure to PM include changes in pulmonary function, chronic respiratory diseases (other than chronic bronchitis), morphological changes, neonatal mortality, cancer, altered host defense mechanisms, and non-asthma respiratory emergency room visits. Estimated economic values have been assigned to death and other adverse health effects. For example, a statistical death has been estimated to cost \$6.3 million (in year 2000 dollars), chronic bronchitis due to PM costs \$260,000 per patient, mortality life years lost is valued at \$293,000 per each life year, and work days lost due to PM is worth about \$83 per day. (EPA, *The Benefits and Costs of the Clean Air Act 1990-2010*, Office of Air and Radiation, Office of Policy, November 1999, Table 5-1.)

F. Reduction of Impacts to Small Businesses for R18-2-602 and Article 15

These rules create minimal increased compliance costs for ADEQ to administer the open burning and prescribed forestry burning programs. ADEQ considered each of the methods prescribed in A.R.S. § 41-1035 for reducing the impact on small businesses. Likewise, it considered each of the methods prescribed in A.R.S. § 41-1055(B)(5)(c). For example, A.R.S. § 41-1035 requires agencies implementing rules to reduce the impacts on small businesses by using certain methods where legal and feasible. Methods that may be used include the following: (1) exempt them from any or all rule requirements, (2) establish performance standards which could replace more costly design or operational requirements, or (3) institute reduced compliance or reporting requirements.

ADEQ cannot provide additional regulatory relief for small businesses applying for open burning permits. As the agency does not charge fees for open burning permits, ADEQ expects that R18-2-602's reporting requirement (on forms developed by ADEQ) will create minimal economic impacts to individual persons or small businesses. The rule procedures have been kept as simple and straightforward as possible. Article 15 does not directly impact small businesses as it applies primarily to public entities.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

In response to comments, and to improve clarity, conciseness, and understandability, ADEQ has made the following changes to the proposed rule:

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

R18-2-602. Unlawful Open Burning

A. In addition to the definitions contained in A.R.S. § 49-501, in this Section:

1. "Agricultural ~~Burning~~ ~~burning~~" means burning of vegetative materials related to the production producing and harvesting of crops and raising of animals for the purpose of marketing for profit, or providing a livelihood, but does not

Notices of Final Rulemaking

- ~~including include~~ the burning of household waste or prohibited materials. ~~Burning may be conducted~~ A person may conduct agricultural burns in fields, piles, ditch banks, fence rows, or canal laterals for purposes such as weed control, waste disposal, disease and pest prevention, or site preparation.
2. "Approved waste burner" means an incinerator constructed of fire resistant material with a cover or screen ~~which that~~ is closed when in use ~~having and has~~ openings in the sides or top no greater than one inch in diameter.
 3. "Class I Area" means any one of the Arizona mandatory federal class I areas defined in A.R.S. § 49-401.01.
 4. "Construction burning" means burning ~~of~~ wood or vegetative material from land clearing, site preparation, or fabrication, erection, installation, demolition, or modification of any buildings or other land improvements, but does not including include the burning of household waste or prohibited materials material.
 5. "Dangerous material" ~~is means~~ any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.
 6. "Delegated authority" means any of the following:
 - a. A county, city, town, air pollution control district, or fire district that has been delegated authority to issue open burning permits by the Director under A.R.S. § 49-501(E); or
 - b. A private fire protection service provider that has been assigned authority to issue open burning permits by one of the authorities in subsection (a).
 7. "Director" means the Director of the Department of Environmental Quality, or ~~his~~ designee.
 8. "Emission reduction techniques" ~~are means techniques methods~~ for controlling emissions from open outdoor fires to minimize the amount of emissions output per unit ~~of~~ area burned.
 9. "Flue," as used in this ~~subsection~~ Section, means any duct or passage for air or combustion gases, such as a stack or chimney.
 10. "Household waste" means any solid waste including garbage, rubbish, and sanitary waste from ~~a septic tanks tank~~ that is generated from households including single and multiple family residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas, but does not including include construction debris, landscaping rubble, or demolition debris.
 11. "Independent authority to permit fires" means the authority of a county to permit fires by a rule adopted ~~pursuant to under~~ Arizona Revised Statutes, Title 49, Chapter 3, Article 3, and includes only Maricopa, Pima, and Pinal counties. ~~have independent authority to permit fires.~~
 12. "Open outdoor fire or open burning" means the combustion of material of any type outdoors; and in the open, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed, and construction burning, and fires using air curtain destructors. ~~Purposes for fires can include prevention of a fire hazard, instruction in the methods of fighting fires, watershed rehabilitation, disease and pest prevention.~~
 13. "Prohibited materials" means nonpaper garbage from the processing, storage, service, or consumption of food; chemically treated wood; lead-painted wood; linoleum flooring, or composite counter-tops; tires; explosives or ammunition; oleanders; asphalt shingles; tar paper; plastic and rubber products, including bottles for household chemicals; plastic grocery and retail bags; waste petroleum products, such as waste crankcase oil, transmission oil, and oil filters; transformer oils; asbestos; batteries; anti-freeze; aerosol spray cans; electrical wire insulation; thermal insulation; polyester products; hazardous waste products such as paints, pesticides, cleaners and solvents, stains and varnishes, and other flammable liquids; plastic pesticide bags and containers; and hazardous material containers including those that contained lead, cadmium, mercury, or arsenic compounds.
 14. "Residential burning" means open burning of vegetative materials conducted by or for the occupants of residential dwellings, but does not including include burning ~~of~~ household waste or prohibited ~~materials~~ material.
 15. "Prescribed burning" has the same meaning as in R18-2-1501.
- B.** Unlawful open burning. Notwithstanding any other rule in this Chapter, ~~it is unlawful for any a person to~~ shall not ignite, cause to be ignited, permit to be ignited, ~~or suffer~~, allow, or maintain any open outdoor fire in a county without independent authority to permit fires except as provided in A.R.S. § 49-501 and this Section.
- C.** Open outdoor fires exempt from a permit. The following fires do not require an open burning permit from the Director or a delegated authority:
1. Fires used only for:
 - a. Cooking of food;₂
 - b. Providing warmth for human beings;₂
 - c. Recreational purposes;₂
 - d. Branding of animals;₂
 - e. Orchard heaters for the purpose of frost protection in farming or nursery operations;₂ and
 - f. The proper disposal of flags under 4 U.S.C. 8.
 2. Any fire set or permitted by any public officer in the performance of official duty, if ~~such the~~ the fire is set or permission given for the following purpose ~~of~~:
 - a. ~~Fire~~ Control of an active wildfire; or

Notices of Final Rulemaking

- b. Instruction in the method of fighting fires, except that the person setting these fires must comply with the reporting requirements of subsection (D)(3)(f).
3. Fires Fire set by or permitted by the Director of Department of Agriculture for the purpose of disease and pest prevention in an organized, area-wide control of an epidemics or ~~infestations~~ infestation affecting livestock or crops.
4. Prescribed burns set by or assisted by the federal government or any of its departments, agencies or agents, or the state or any of its agencies, departments, or political subdivisions, ~~pursuant to~~ regulated under Article 15 of this Chapter.
- D. Open outdoor fires requiring a permit.
1. The following open outdoor fires are allowed with an open burning permit from the Director or a delegated authority:
- Construction burning;
 - Agricultural burning;
 - Residential burning;
 - Prescribed burns conducted on private lands without the assistance of a federal or state land manager as defined under R18-2-1501;
 - Any fire set or permitted by a public officer in the performance of official duty, if ~~such the~~ the fire is set or permission given for the purpose of weed abatement, the prevention of a fire hazard, ~~or instruction in the methods of fighting fires,~~ unless ~~such the~~ the fire is exempt from the permit requirement under subsection (C)(3);
 - Open outdoor fires of dangerous material under subsection (E); ~~and~~
 - Open outdoor fires of household waste under subsection (F); and
 - Open outdoor fires that use an air curtain destructor, as defined in R18-2-101.
2. A person conducting an open outdoor fire in a county without independent authority to permit fires shall obtain a permit from the Director or a delegated authority unless exempted under subsection (C). Permits may be issued for a period not to exceed one year. A person shall obtain a permit by completing an ADEQ-approved application form.
3. Open outdoor fire permits issued under this Section shall include:
- A list of the materials that the permittee may ~~be burned~~ burn under the permit;
 - A means of contacting the ~~person~~ permittee authorized by the permit to set an open fire in the event that an order to extinguish the open outdoor fire is issued by the Director or the delegated authority;
 - A requirement that burns be conducted during the following periods, unless otherwise waived or directed by the Director on a specific day basis:
 - Year round: ~~start ignition~~ ignite fire no earlier than ~~one~~ one hour after sunrise; and
 - Year round: extinguish fire ~~must be extinguished~~ no later than ~~two~~ two hours before sunset.
 - A requirement that the permittee conduct all open burning ~~shall be conducted~~ only during atmospheric conditions ~~which that~~:
 - Prevent dispersion of smoke into populated areas;
 - Prevent visibility impairment on traveled roads or at airports that results in a safety hazard;
 - Do not create a public nuisance or adversely affect public safety;
 - Do not cause an adverse impact to visibility in a Class I area; and
 - Do not cause uncontrollable spreading of the fire;
 - A ~~listing list~~ list of the ~~types of actions~~ emission reduction techniques that the permittee shall ~~be utilized~~ use to minimize fire emissions; ~~including any emission reduction techniques;~~
 - A reporting requirement that the permittee shall ~~be met~~ meet by providing the following information in a format provided by the Director for each date open burning occurred, on either a daily basis on the day of the fire, ~~or in~~ an annual basis in a report to the Director or delegated authority due on March 31 for the previous calendar year:
 - The date of the burn;
 - The type and quantity of fuel burned for each date open burning occurred;
 - The fire type, such as pile or ~~windrow~~ pit, for each date open burning occurred; and
 - For each date open burning occurred, the legal location, to the nearest section, or latitude and longitude, to the nearest degree minute, or street address for residential burns.
 - A requirement that the person conducting the open burn notify the local fire-fighting agency; or private fire protection service provider, if the service provider is a delegated authority, before burning. ~~or If none~~ neither is in existence, the person conducting the burn shall notify the state forester, ~~prior to commencement of open burning;~~
 - A requirement that the permittee start each open outdoor fire ~~be started~~ using items that do not cause the production of black smoke;
 - A requirement that the permittee attend the fire ~~shall be attended~~ at all times until it is completely extinguished;
 - A requirement that the permittee provide fire extinguishing equipment ~~must be~~ on-site for the duration of the burn;
 - A requirement that the permittee ensure that a burning pit, burning pile, or approved waste burner be at least 50 feet from any structure;
 - A requirement that the ~~burner~~ permittee have a copy of the burn permit on-site during open burning;

Notices of Final Rulemaking

- m. A requirement that ~~the permittee not conduct~~ ~~no~~ open burning ~~shall be conducted~~ when an air stagnation advisory, as issued by the National Weather Service, is in effect in the area of the burn or during periods when smoke can be expected to accumulate to the extent that it will significantly impair visibility in Class I areas;
- n. A requirement that ~~the permittee not conduct~~ ~~no~~ open burning ~~shall be conducted~~ when any stage air pollution episode is declared under R18-2-220.
- o. A statement that the Director, or any other public officer may order that the burn be extinguished or prohibit burning during periods of inadequate smoke dispersion, excessive visibility impairment, or ~~during periods of~~ extreme fire danger; and
- p. A ~~copy~~ list of the activities prohibited and the criminal penalties provided under A.R.S. § 13-1706.
- 4. The Director or a delegated authority shall not issue an open burning permit under this Section:
 - a. That would allow ~~the~~ burning ~~of~~ prohibited materials other than under a permit for the burning of dangerous materials;
 - b. If the applicant has applied for a permit under this Section to burn ~~a~~ dangerous ~~materials~~ material which ~~are~~ is also hazardous waste under 40 CFR 261, but does not have a permit ~~for the burning to burn~~ of hazardous waste under 40 CFR 264, or is not an interim status facility allowed to burn hazardous waste under 40 CFR 265; or
 - c. If the burning would occur at a solid waste facility in violation of 40 CFR 258.24 and the Director has not issued a variance ~~approval~~ under A.R.S. § 49-763.01(A).
- E. Open outdoor fires of dangerous material. ~~A~~ fires fire set for the disposal of ~~a~~ dangerous ~~materials~~ material ~~are~~ is allowed by the provisions of this Section, when the ~~materials~~ material ~~are~~ is too dangerous to store and transport, ~~as permitted in writing by~~ and the Director ~~has issued a permit for the fire.~~ A ~~permits~~ permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). ~~The Director shall permit~~ fires ~~set for the disposal of dangerous materials shall be permitted~~ only when ~~there is~~ no safe alternative method of disposal exists, and ~~when the burning of such~~ the materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts that will endanger health or safety.
- F. Open outdoor fires of household waste. ~~An~~ open outdoor ~~fires~~ fire for the disposal of household waste ~~are~~ is allowed by provisions of this Section when permitted in writing by the Director or a delegated authority. ~~Permits~~ A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). ~~The applicant shall conduct~~ open outdoor fires of household waste ~~shall be burned~~ in an approved waste burner and shall either:
 - 1. Burn household waste generated on-site on farms or ranches of 40 acres or more where no household waste collection or disposal service is available; or
 - 2. Burn household waste generated on-site where no household waste collection and disposal service is available and where the nearest other dwelling unit is at least 500 feet away.
- G. Permits issued by a delegated authority. The Director may delegate authority for the issuance of open burning permits to a county, city, town, air pollution control district, or fire district. A delegated authority may not issue a permit for its own open burning activity. ~~Authority~~ The Director shall not delegate authority for issuance of permits to burn dangerous material under subsection (E). ~~shall be retained by the Director and not delegated.~~ A county, city, town, air pollution control district, or fire district with delegated authority from the Director may assign that authority to one or more private fire protection service providers that perform fire protection services within the county, city, town, air pollution control district, or fire district. A private fire protection provider shall not directly or indirectly condition the issuance of open burning permits on the applicant being a customer. Permits issued under this subsection shall comply with the requirements in subsection (D)(3) and be in a format prescribed by the Director. Each delegated authority shall:
 - 1. Maintain a copy of each permit issued for the previous five years available for inspection by the Director;
 - 2. For each permit currently issued, have a means of contacting the person authorized by the permit to set an open fire ~~in the event that~~ if an order for extinguishing of to extinguish open burning is issued; and
 - 3. Annually submit to the Director by May 15 a record of daily burn activity, excluding household waste burn permits, on a form provided by the Director for the previous calendar year containing the information required in subsections (D)(3)(e) and (D)(3)(f).
- H. The Director shall hold an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.
- I. Nothing in this Section is intended to permit any practice ~~which~~ that is a violation of any statute, ordinance, rule, or regulation.

ARTICLE 15. FOREST AND RANGE MANAGEMENT BURNS

R18-2-1501. Definitions

In addition to the definitions contained in A.R.S. § 49-501 and R18-2-101, in this Article:

- 1. “Activity fuels” means those fuels created by human activities such as thinning or logging.
- ~~1-2.~~ “ADEQ” means the Department of Environmental Quality.
- ~~2-3.~~ “Annual emissions goal” means the annual establishment in cooperation with the F/SLM’s, under R18-2-1503(G), of

Notices of Final Rulemaking

- a planned quantifiable value of emissions reduction from prescribed fires and fuels management activities.
- ~~3-4.~~ "Burn plan" means the ADEQ form that includes information on the conditions under which ~~the~~ a burn will occur with details of the burn and smoke management prescriptions.
- ~~4-5.~~ "Burn prescription" means, with regard to a burn project, the pre-determined area, fuel, and weather conditions required to attain planned resource management objectives.
- ~~5-6.~~ "Burn project" means an active or planned prescribed burn, including a wildland fire use incident.
- ~~6-7.~~ "Duff" means forest floor material consisting of decomposing needles and other natural materials.
- ~~7-8.~~ "Emission reduction techniques (ERT)" means ~~techniques~~ methods for controlling emissions from prescribed fires to minimize the amount of emission output per unit of area burned.
- ~~8-9.~~ "Federal land manager (FLM)" means any department, agency, or agent of the federal government, including the following:
- a. United States Forest Service,
 - b. United States Fish and Wildlife Service,
 - c. National Park Service,
 - d. Bureau of Land Management,
 - e. Bureau of Reclamation,
 - f. Department of Defense,
 - g. Bureau of Indian Affairs, and
 - h. Natural Resources Conservation Service.
- ~~9-10.~~ "F/SLM" means a federal land manager or a state land manager.
- ~~10-11.~~ "Local fire management officer" means a person designated by a F/SLM as responsible for fire management in a local district or area.
- ~~11-12.~~ "Mop-up" means the act of extinguishing or removing burning material from a prescribed fire to reduce smoke impacts.
- ~~12-13.~~ "National Wildfire Coordinating Group" means the national inter-agency group of federal and state land managers that shares similar wildfire suppression programs and ~~that~~ has established standardized inter-agency training courses and qualifications for fire management positions.
- ~~13-14.~~ "Non-burning alternatives to fire" ~~are~~ means techniques that replace fire for at least five years as a means to treat activity fuels created to achieve a particular land management objective (e.g., reduction of fuel-loading, manipulation of fuels, enhancement of wildlife habitat, and ecosystem restoration, ~~etc.~~). These alternatives are not used in conjunction with fire. Techniques used in conjunction with fire are referred to as emission reduction techniques (ERTs).
- ~~14-15.~~ "Planned resource management objectives" means public interest goals in support of land management agency objectives including silviculture, wildlife habitat management, grazing enhancement, fire hazard reduction, wilderness management, cultural scene maintenance, weed abatement, watershed rehabilitation, vegetative manipulation, and disease and pest prevention.
- ~~15-16.~~ "Prescribed burning" means the controlled application of fire to wildland fuels that are in either a natural or modified state, under certain burn ~~prescription conditions~~ and smoke management prescription conditions that have been specified by the land manager in charge of or assisting the burn, to attain planned resource management objectives. Prescribed burning does not include a fire set or permitted by a public officer to provide instruction in fire fighting methods, or construction or residential burning under R18-2-602.
- ~~16-17.~~ "Prescribed fire manager" means a person designated by a F/SLM as responsible for prescribed burning for that land manager.
- ~~17-18.~~ "Smoke management prescription" means the predetermined meteorological conditions that affect smoke transport and dispersion under which a burn could occur without adversely affecting public health and welfare.
- ~~18-19.~~ "Smoke management techniques" (SMT) means management and dispersion practices used during a prescribed burn or wildland fire use incident which affect the direction, duration, height, or density of smoke.
- ~~19-20.~~ "Smoke management unit" means any of the geographic areas defined by ADEQ whose area is based on primary watershed boundaries and whose ~~outlines are~~ outline is determined by diurnal windflow patterns that allow smoke to follow predictable drainage patterns. A map of the state divided into the smoke management units is on file with ADEQ.
- ~~20-21.~~ "State land manager (SLM)" means any department, agency, or political subdivision of the state government including the following:
- a. State Land Department,
 - b. Department of Transportation,
 - c. Department of Game and Fish, and
 - d. Parks Department.
- ~~21-22.~~ "Wildfire" means an unplanned wildland fire subject to appropriate control measures. Wildfires include those incidents where suppression may be limited for safety, economic, or resource ~~limitations concerns~~.
- ~~22-23.~~ "Wildland fire use" means a wildland fire that is ignited by natural causes, such as lightning, ~~that and is subse-~~

quently managed using the same controls and for the same planned resource management objectives as prescribed burning.

R18-2-1502. Applicability

- A. A F/SLM that is conducting or assisting a prescribed burn shall follow the requirements of this Article.
- B. A private or municipal burner with whom ADEQ has entered into a memorandum of agreement shall follow the requirements of this Article.
- C. The provisions of this Article apply to all areas of the state except Indian Trust lands. All federally-managed lands and all state lands, parks, and forests are under the jurisdiction of ADEQ in matters relating to air pollution from prescribed burning.
- D. Notwithstanding subsection ~~(B)~~ (C), ADEQ and any Indian tribe may enter into a memorandum of agreement to implement this Article.
- E. ADEQ and any private or municipal prescribed burner may enter into a memorandum of agreement to implement this Article.

R18-2-1503. Annual Registration, Program Evaluation and Planning

- A. Each F/SLM shall register annually with ADEQ on a form prescribed by ADEQ, all planned burn projects, including areas planned for wildland fire use.
- B. Each planned year extends from January 1 of the registration year to December 31 of the same year. Each F/SLM shall use best efforts to register before December 31 and no later than January 31 of each year.
- C. A F/SLM shall include the following information on the registration form:
 - 1. The F/SLM's name, address, and business telephone number;
 - 2. The name, address, and business telephone number of an air quality representative who will provide technical support to ADEQ for decisions regarding prescribed burning. The same air quality representative may be selected by more than one F/SLM;
 - 3. All prescribed burn projects and potential wildland fire use areas planned for the next year;
 - 4. ~~By prescribed burn project,~~ Maximum project and annual acres to be burned, maximum daily acres to be burned, fuel types within project area, and planned use of emission reduction techniques to support the annual emissions goal for each prescribed burn project;
 - 5. ~~By prescribed burn project,~~ Planned use of any smoke management techniques for each prescribed burn project;
 - 6. ~~By area planned for wildland fire use,~~ Maximum project and annual acres projected to be burned, maximum daily acres projected to be burned, and a map of the anticipated project area, fuel types and loading within the planned area for an area the F/SLM anticipates for wildland fire use;
 - 7. A list of all burn projects that were completed during the previous year;
 - 8. ~~By area to be treated using non-burning alternatives to fire,~~ Project area for treatment, treatment type, fuel types to be treated, and activity fuel loading to support the annual emissions goal for areas to be treated using non-burning alternatives to fire; and
 - 9. The area treated using non-burning alternatives to fire ~~utilized~~ during the previous year including the number of acres, the specific types of alternatives utilized, and the location of these areas.
- D. After consultation with the F/SLM, ADEQ may request additional information for registration of prescribed burns and wildland fire use to support regional coordination of smoke management, annual emission goal setting ~~utilizing~~ using ERTs, and non-burning alternatives to fire.
- E. A F/SLM may amend a registration at any time with a written submission to ADEQ.
- F. ADEQ ~~shall accept~~ accepts a facsimile or other electronic methods as a means of complying with the deadline for registration. If an electronic means are is used, the F/SLM shall deliver the original paper registration form to ADEQ for its records. ADEQ shall acknowledge in writing the receipt of each registration.
- G. ADEQ shall hold ~~an annual~~ a meeting after January 31 and ~~prior to~~ before April 1 of each year between ADEQ and F/SLM's ~~for program evaluation~~ to evaluate the program and ~~to~~ cooperatively establish the annual emission goal. The annual emission goal shall be developed to minimize prescribed fire emissions to the maximum extent feasible using emission reduction techniques and alternatives to burning subject to economic, technical, and safety feasibility criteria, and consistent with land management objectives.
- H. At least once every five years, ADEQ shall request long-term projections of future prescribed fire and wildland fire use activity from the F/SLMs to support planning for visibility impairment and assessment of other air quality concerns by ADEQ.

R18-2-1504. Prescribed Burn Plan

Each F/SLM planning a prescribed burn; shall complete and submit to ADEQ the "Burn Plan" form supplied by ADEQ no later than 14 days before the date on which the F/SLM requests permission to burn. ~~The information supplied on the Burn Plan Form are considered~~ ADEQ shall consider the information supplied on the Burn Plan Form as binding conditions under which the burn shall be conducted. A Burn Plans shall be maintained by ADEQ until notification from the F/SLM of the completion of the burn project. Revisions to the Burn Plan for a burn project shall be submitted in writing no later than 14 days before the

Notices of Final Rulemaking

date on which the F/SLM requests permission to burn. To facilitate the Daily Burn authorization process under R18-2-1505, the F/SLM shall include on the Burn Plan form:

1. An emergency telephone number that is answered 24 hours a day, seven days a week;
2. Burn prescription;
3. Smoke management prescription;
4. The number of acres to be burned, the quantity and type of fuel, type of burn, and the ignition technique to be used;
5. The land management objective or purpose for the burn such as restoration or maintenance of ecological function and indicators of fire resiliency;
6. A map depicting the potential impact of the smoke unless waived either ~~verbally~~ orally or in writing by ADEQ. The potential impact shall be determined by mapping both the daytime and nighttime smoke path and down-drainage flow for 15 miles from the burn site, with smoke-sensitive areas delineated. The map shall use the appropriate scale to show the impacts of the smoke adequately;
7. Modeling of smoke impacts unless waived either ~~verbally~~ orally or in writing by ADEQ, for burns greater than 250 acres per day, or greater than 50 acres per day if the burn is within 15 miles of a Class I Area, an area that is non-attainment for particulates, a carbon monoxide non-attainment area, or other smoke-sensitive area. In consultation with the F/SLM, ADEQ shall provide guidelines on modeling;
8. The name of the official submitting the Burn Plan on behalf of the F/SLM; and
9. After consultation with the F/SLM, any other information to support the Burn Plan needed by ADEQ to assist in the Daily Burn authorization process for smoke management purposes or assessment of contribution to visibility impairment of Class I areas.

R18-2-1505. Prescribed Burn Requests and Authorization

- A. Each F/SLM planning a prescribed burn, shall complete and submit to ADEQ the “Daily Burn Request” form supplied by ADEQ. The Daily Burn Request form shall include:
 1. The contact information of the F/SLM conducting the burn;
 2. Each day of the burn;
 3. The area to be burned on ~~that~~ the day for which the Burn Request is submitted, with reference to the Burn Plan, including size, legal location to the section and latitude/ and longitude to the minute;
 4. Projected smoke impacts; and
 5. Any local conditions or circumstances known to the F/SLM that, if conveyed to ADEQ, could impact the Daily Burn authorization process.
- B. After consultation with the F/SLM, ADEQ may request additional information related to the burn, meteorological, smoke dispersion, or air quality conditions to supplement the Daily Burn Request form and to aid in the Daily Burn authorization process.
- C. The F/SLM shall submit the Daily Burn Request form to ADEQ as expeditiously as practicable, but no later than 2:00 p.m. of the business day preceding the burn. An original form, a facsimile, or an electronic information transfer are acceptable submittals.
- D. An F/SLM shall not ignite a prescribed burn without receiving the approval of ADEQ, as follows:
 1. ADEQ shall approve, approve with conditions, or disapprove a burn on the same business day as the Burn Request submittal.
 2. If ADEQ fails to address a Burn Request by 10:00 p.m. of the business day on which the request ~~was~~ is submitted, the Burn Request is approved by default after the burner makes a good faith effort to contact ADEQ to confirm that the Burn Request was received.
 3. ADEQ may communicate its decision by verbal, written, or electronic means. ADEQ shall provide a written or electronic reply if requested by the F/SLM.
- E. If weather conditions cease to conform to those in the smoke management prescription of either the Burn Plan or an Approval with Conditions, the F/SLM shall take appropriate action to reduce further smoke impacts, ensure safe and appropriate fire control, and notify the public when necessary. After consultation with ADEQ, the smoke management prescription or burn plan may be modified.
- F. The F/SLM ~~is responsible for~~ shall ensure that there is appropriate signage and notification to protect public safety on transportation corridors including roadways and airports during a prescribed fire.

R18-2-1506. Smoke Dispersion Evaluation

ADEQ shall approve, approve with conditions, or disapprove a Daily Burn Request submitted ~~pursuant to~~ under R18-2-1505, by using the following factors for each smoke management unit:

1. Analysis of the emissions from burns in progress and residual emissions from previous burns on a day-to-day basis;
2. Analysis of emissions from active wildland fire use incidents, and active multiple-day burns, and consideration of potential long-term emissions estimates;
3. Analysis of the emissions from wildfires greater than 100 acres and consideration of their potential long-term growth;
4. Local burn conditions;

Notices of Final Rulemaking

5. Burn prescription and smoke management prescription from the applicable Burn Plan;
6. Existing and predicted local air quality;
7. Local and synoptic meteorological conditions;
8. Type and location of areas to be burned;
9. Protection of the national visibility goal for Class I Areas ~~pursuant to~~ under § 169A(a)(1) of the Act and 40 CFR 51.309;
10. Assessment of duration and intensity of smoke emissions to minimize cumulative impacts; ~~and~~
11. Minimization of smoke impacts in Class I Areas, areas that are non-attainment for particulate matter, carbon monoxide non-attainment areas, or other smoke-sensitive areas; ~~and~~
12. Protection of the National Ambient Air Quality Standards.

R18-2-1507. Prescribed Burn Accomplishment; Wildfire Reporting

- A. Each F/SLM conducting a prescribed burn shall complete and submit to ADEQ the "Burn Accomplishment" form supplied by ADEQ. For each burn approval, the F/SLM shall submit a Burn Accomplishment form to ADEQ by 2:00 p.m. of the business day following the approved ~~burning~~ burn. The F/SLM shall include the following information on the Burn Accomplishment form:
 1. Any known conditions or circumstances that could impact the Daily Burn decision process;
 2. The date, location, fuel type, fuel loading, and acreage accomplishments;
 3. The ERTs and SMTs described in R18-2-1509 and R18-2-1510, respectively, and may include any further ERTs and SMTs that become available, that the F/SLM used to reduce emissions or manage the smoke from the burn.
- B. The F/SLM shall submit the Burn Accomplishment form as an original form, a facsimile, or an electronic information transfer.
- C. ADEQ shall maintain a record of Burn Requests, Burn Approvals/Conditional Approvals/Denials and Burn Accomplishments for ~~5~~ five years.
- D. The F/SLM in whose jurisdiction a wildfire occurs shall make available to ADEQ no later than the day after the activity all required information for wildfire incidents that burned more than 100 acres per day in timber or slash fuels or 300 acres per day in brush or grass fuels. For each day of a wildfire incident that ~~exceeded~~ exceeds the daily activity threshold, the F/SLM shall provide the location, an estimate of predominant fuel type and quantity consumed, and an estimate of the area blackened that day.

R18-2-1508. Wildland Fire Use: Plan, Authorization, Monitoring; Inter-agency Consultation; Status Reporting

- A. In order for ADEQ to participate in the wildland fire use decision-making process, the F/SLM shall notify ADEQ as soon as practicable of any wildland fire use incident projected to attain or attaining a size of 50 acres of timber fuel or 250 acres of brush or grass fuel.
- B. For each wildland fire use incident that has been declared as such by the F/SLM, the F/SLM shall complete and submit to ADEQ a Wildland Fire Use Burn Plan in a format approved by ADEQ in cooperation with the F/SLM. The F/SLM shall submit the Wildland Fire Use Burn Plan to ADEQ as soon as practicable but no later than 72 hours after the wildland fire use incident is declared or under consideration for such designation. The F/SLM shall include the following information in the Wildland Fire Use Burn Plan:
 1. An emergency telephone number that is answered 24 hours a day seven days a week;
 2. Anticipated burn prescription;
 3. Anticipated smoke management prescription;
 4. The estimated daily number of acres, quantity, and type of fuel to be burned;
 5. The anticipated maximum allowable perimeter or size with map;
 6. Information on the condition of the area to be burned, such as whether it is in maintenance or restoration, its ecological function ~~or~~ and other indicators of fire resiliency;
 7. The anticipated duration of the wildland fire use incident;
 8. The anticipated long-range weather trends for the site;
 9. A map depicting the potential impact of the smoke. The potential impact shall be determined by mapping both the daytime and nighttime smoke path and down-drainage flow for 15 miles from the wildland fire use incident, with smoke-sensitive areas delineated. Mapping is mandatory unless waived either ~~verbally~~ orally or in writing by ADEQ. The map shall use the appropriate scale to show the impacts of the smoke adequately; and
 10. Modeling or monitoring of smoke impacts, if requested by ADEQ after consultation with the F/SLM.
- C. ADEQ shall approve or disapprove a Wildland Fire Use Burn Plan within ~~3~~ three hours of receipt. ADEQ shall consult directly with the requesting F/SLM before disapproving a Wildland Fire Use Burn Plan. If ADEQ fails to address the Wildland Fire Use Burn Plan within the time allotted, the Plan is approved by default under the condition that the F/SLM makes a good faith effort to contact ADEQ to confirm that the Plan was received. Approval by ADEQ of a Wildland Fire Use Burn Plan ~~shall be~~ is binding upon ADEQ for the duration of the wildland fire use incident, unless smoke from the incident creates a threat to public health or welfare. If a threat to public health or welfare is created, ADEQ shall consult with the F/SLM regarding the situation and develop a joint action plan for reducing further smoke impacts.

Notices of Final Rulemaking

- D. The F/SLM shall submit a Daily Status Report for each wildland fire use incident to ADEQ for each day of the burn that the fire burns more than 100 acres in timber or slash fuels or 300 acres in brush or grass fuels. The F/SLM shall include a synopsis of smoke behavior, future daily anticipated growth, and location of the activity of the wildland fire use incident in the Daily Status Report.
- E. The F/SLM shall consult with ADEQ prior to initiating ~~man-made~~ human-made ignition on the wildland fire use incident when greater than 250 acres is anticipated to be burned by the ignition. Emergency ~~man-made~~ human-made ignition on the incident for protection of public or fire-fighter safety does not require consultation with ADEQ regardless of the size of the area to be burned.
- F. The F/SLM ~~is responsible for~~ shall ensure that there is appropriate signage and notification to protect public safety on transportation corridors including roadways and airports during a wildland fire use incident.

R18-2-1509. Emission Reduction Techniques

- A. Each F/SLM conducting a prescribed burn shall implement as many Emission Reduction Techniques as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives.
- B. Emission reduction techniques include:
 - 1. Reducing biomass to be burned by use of techniques such as yarding or consolidation of unmerchandiseable material, multi-product timber sales, or public firewood access, when economically feasible;
 - 2. Reducing biomass to be burned by fuel exclusion practices such as preventing the fire from consuming dead snags or dead and downed woody material through lining, application of fire-retardant foam, or water;
 - 3. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires of high fuel density areas such as logging slash decks;
 - 4. Burning only fuels essential to meet resource management objectives;
 - 5. Minimizing consumption and smoldering by burning under conditions of high fuel moisture of duff and litter;
 - 6. Minimizing fuel consumption and smoldering by burning under conditions of high fuel moisture of large woody fuels;
 - 7. Minimizing soil content when slash piles are constructed by using brush blades on material-moving equipment and by constructing piles under dry soil conditions or by using hand piling methods;
 - 8. Burning fuels in piles;
 - 9. Using a backing fire in grass fuels;
 - 10. Burning fuels with an air curtain destructor, as defined in R18-2-101, operated ~~pursuant~~ according to manufacturer specifications and meeting applicable ~~State state~~ or local opacity requirements;
 - 11. Extinguishing or mopping-up of smoldering fuels;
 - 12. Chunking of piles and other consolidations of burning material to enhance flaming; and fuel consumption, and to minimize smoke production;
 - 13. ~~Burn~~ Burning before litter fall;
 - 14. ~~Burn~~ Burning before green-up of fuels;
 - 15. ~~Burn~~ Burning before recently cut large fuels cure in areas with activity; and
 - 16. ~~Burn~~ Burning just ~~prior to~~ before precipitation to reduce fuel smoldering and consumption.

R18-2-1510. Smoke Management Techniques

- A. Each F/SLM conducting a prescribed burn shall implement as many Smoke Management Techniques as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives.
- B. ~~Smoke Management Techniques~~ management techniques include:
 - 1. Burning from March 15 through September 15, when meteorological conditions allow for good smoke dispersion;
 - 2. Igniting burns under good-to-excellent ventilation conditions;
 - 3. Suspending operations under poor smoke dispersion conditions;
 - 4. Considering smoke impacts on local community activities and land users;
 - 5. Burning piles when other burns are not feasible, such as when snow or rain is present;
 - 6. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires with short duration impacts;
 - 7. Using all opportunities that meet the burn prescription and all burn locations to spread smoke impacts over a broader time period and geographic area;
 - 8. Burning during optimum mid-day dispersion hours, with all ignitions in a burn unit completed by 3:00 p.m. to prevent trapping smoke in inversions or diurnal windflow patterns;
 - 9. ~~When allowing public firewood access, provide~~ Providing information on the adverse impacts of using green or wet wood as fuel when public firewood access is allowed;
 - 10. Implementing maintenance burning in a periodic rotation to shorten prescribed fire duration and to reduce excessive fuel accumulations ~~which that~~ could result in excessive smoke production in a wildfire; and
 - 11. Using wildland fire-use strategies to shift smoke into more favorable smoke dispersion seasons.

R18-2-1511. Monitoring

Notices of Final Rulemaking

- A. ADEQ may require a F/SLM to monitor air quality before or during a prescribed burn or a wildland fire use incident if necessary to assess smoke impacts. Air quality monitoring may be conducted using both federal and non-federal reference method as well as other techniques.
- B. ADEQ may require a F/SLM to monitor weather before or during a prescribed burn or a wildland fire use incident, if necessary to predict or assess smoke impacts. After consultation with the F/SLM, ADEQ may also require the F/SLM to establish burn site or area-representative remote automated weather stations or their equivalent, having telemetry that allows retrieval on a real-time basis by ADEQ. An F/SLM ~~planning to make a change to any long-term established remote automated weather station~~ shall give ADEQ notice and an opportunity to comment before making the any change to a long-term established remote automated weather station.
- C. A F/SLM shall employ the following types of monitoring, unless waived by ADEQ, for burns greater than 250 acres per day, or greater than 50 acres per day if the burn is within 15 miles of a Class I Area, an area that is non-attainment for particulate matter, carbon monoxide, or ozone, or other smoke-sensitive area:
 - 1. Smoke plume measurements, using a format supplied by ADEQ; and
 - 2. The release of pilot balloons (PIBALs) at the burn site to verify needed wind speed, direction, and stability.
~~In lieu of~~ Instead of pilot balloons, a test burn at the burn site may be used for specific prescribed burns on a case-by-case basis as approved by ADEQ, to verify needed wind speed, direction, and stability.
- D. An F/SLM shall make monitoring information required ~~pursuant to~~ under subsection (C) available to ADEQ on the business day following the burn ignition.
- E. The F/SLM shall keep on file for ~~±~~ one year following the burn date any monitoring information required ~~pursuant~~ under to this Section.

R18-2-1512. Burner Qualifications

- A. All burn projects shall be conducted by personnel trained in prescribed fire and smoke management techniques as required by the F/SLM in charge of the burn and established by National Wildfire Coordinating Group training qualifications.
- B. A Prescribed Fire Boss or other local Fire Management Officer of the F/SLM having jurisdiction over prescribed burns shall have smoke management training obtained through one of the following:
 - 1. Successful completion of a National Wildfire Coordinating Group or F/SLM-equivalent course addressing smoke management; or
 - 2. Attendance at an ADEQ-approved smoke management workshop.

R18-2-1513. Public Notification and Awareness Program; Regional Coordination

- A. The Director shall conduct a public education and awareness program in cooperation with F/SLMs and other interested parties to inform the general public of the smoke management program described by this Article. The program shall include smoke impacts from prescribed fires and the role of prescribed fire in natural ecosystems.
- B. ADEQ shall make annual registration, prescribed burn approval, and wildfire and wildland fire use activity information readily available to the public and to facilitate regional coordination efforts and public notification.

R18-2-1514. Surveillance and Enforcement

- A. An F/SLM conducting a prescribed burn shall permit ADEQ to enter and inspect burn sites unannounced to verify the accuracy of the Daily Burn Request, Burn Plan, or Accomplishment data as well as matching burn approval with actual conditions, smoke dispersion, and air quality impacts. On-ground site inspection procedures and aerial surveillance shall be coordinated by ADEQ and the F/SLM for safety purposes.
- B. ADEQ may use remote automated weather station data if necessary to verify current and previous meteorological conditions at or near the burn site.
- C. ADEQ may audit burn accomplishment data, smoke dispersion measurements, or weather measurements from previously conducted burns, if necessary to verify conformity with, or deviation from, procedures and authorizations approved by ADEQ.
- D. Deviation from procedures and authorizations approved by ADEQ constitute a violation of this Article. Violations may require containment or mop-up of any active burns and may also require, in the Director's discretion, a ~~5~~ five-day moratorium on ignitions by the responsible F/SLM. Violations of this Article are also subject to a civil penalty of not more than \$10,000 per day per violation ~~pursuant to~~ under A.R.S. § 49-463.

R18-2-1515. Forms; Electronic Copies; Information Transfers

- A. ADEQ shall make available on paper and in electronically-readable format any form required to be developed by ADEQ and completed by a F/SLM.
- B. After consultation with ~~the an~~ the F/SLM, ADEQ may require ~~each the~~ the F/SLM to provide data in a manner that facilitates electronic transfers of information.

11. A summary of the comments made regarding the rule and the agency response to them:

Comment #1: A large number of commenters focused on the proposed requirement that fires set for the purpose of training firefighters now be permitted. In the current rule, fires set for training purposes are excepted from the permit requirement. Commenters felt that requiring permits for such fires was an unnecessary and impracticable interference in their operations.

Response #1: ADEQ had proposed to require that fires set for training purposes be permitted in an effort to better track and report emissions data from such fires through the notice requirement included in fire permits (R18-2-602(D)(3)(f)). However, ADEQ agrees that requiring fire officers to apply to ADEQ or a delegated authority could be impracticable; the data can be adequately tracked with a similar notice requirement while still exempting such fires from the actual permit requirement. ADEQ will add language to R18-2-602(C)(2), the subsection which enumerates those fires exempted from the permit requirement, to read "... if such fire is set or permission given for the purpose of fire control of an active wildfire, or instruction in the methods of fighting fires," with the inclusion of a notice requirement similar to the one in subsection (D)(3)(f). It should be noted that this notice requirement can be satisfied by an annual report to the Director or delegated authority; it is not required that each individual training fire be reported.

Comment #2: One commenter suggested that subsection (G), which deals with permits issued by a delegated authority, be changed. Specifically, there is a provision in that subsection which prohibits delegated authorities from issuing permits to themselves. Commenter suggested adding a sentence ("Permits issued by a delegated authority for the purpose of instruction in the methods of fire fighting are excepted from the provisions of this rule.") excepting training fires from this prohibition.

Response #2: Exempting training fires from the permit requirement, generally, makes it unnecessary to add an exception to subsection (G).

Comment #3: One commenter objected to subsection (G), claiming it was unenforceable and would create administrative and practical difficulties. Commenter asked, "if an agency is not responsible enough to control its own fires and training then why should they be allowed to issue permits to the public?"

Response #3: ADEQ does not intend to prevent a delegated authority from issuing any permits, just permits from themselves to themselves. ADEQ thinks it is appropriate to oversee permits to delegated authorities, both to avoid potential conflicts of interest as well as better track emissions data. It should be noted that a number of commenters think that these permits are issued on a fire-by-fire basis. In fact, open burning permits have a term of up to one year, and can cover multiple burn projects.

Comment #4: One commenter asked if any of the model fire codes, or the National Fire Protection Agency Standards were consulted when drafting these rules.

Response #4: No. ADEQ has reviewed the National Fire Protection Agency Standards and the NFPA 1 Uniform Fire Code, 2003 Edition, to determine their relevance to air quality and whether their consideration might improve the proposed rules. ADEQ found that these documents deal with fire safety, fire-fighting, and fire preparedness issues. These areas fall outside the scope of this rule. ADEQ's fire rules deal with the control of emissions and the tracking of emissions related data, rather than the actual control of fires themselves.

Comment #5: One commenter requested clarification on the difference between subsection (C)(3), fires set for the "purpose of disease and pest prevention in organized, area-wide control of epidemics or infestations..." which are exempt from permit requirements, and subsection (D)(1)(e) fires set for the "purpose of weed abatement, the prevention of a fire hazard..." which are subject to permit requirements.

Response #5: Fires described in (C)(3) would be fires authorized by the Director of the Department of Agriculture in an emergency in order to prevent the spread of disease or pest infestation. In such a situation, time constraints may make the normal permitting procedure ineffective. Representatives from the Department of Agriculture were included in the Fire Emissions Work Group. They indicated that they needed this authority so that they might effectively deal with such an emergency. It should be noted that there has been no need, up to the present time, for this authority to be exercised. Fires under (D)(1)(e), however, are not likely to be emergency in nature, and such burners should go through the normal permitting procedure.

Comment #6: Commenter proposed changing (D)(3)(c) so that it reads "[a] requirement that burns be conducted during the following periods, unless otherwise waived or directed by the Director or delegated authority on a specific day basis." The provision limits fires from one hour after sunrise to two hours before sunset.

Response #6: ADEQ thinks it is appropriate that the Director retain authority in this matter. Atmospheric conditions change just before sunset, usually minimizing smoke dispersion. For this reason, most burns should be conducted during the day. There are circumstances where nighttime, or extended daytime, burns might be appropriate, but ADEQ thinks that authority to make that decision should, in general, remain centralized with the Director.

Comment #7: Commenter noted that R18-2-602(D)(3)(f) is in reference to a reporting requirement, and asks if the report form will be available to the delegated authority or will each applicant be responsible for providing this information.

Response #7: The most likely scenario is that the burner will be required by his or her permit to notify the permitting authority of their burn, either on a daily or annual basis. The delegated authority would then take down the pertinent information on the form provided by ADEQ for this purpose, and report that information to ADEQ under subsection (G)(3) in an annual report to the Director.

Comment #8: Commenter suggested that, in (D)(3)(g) “a notation should be made that the applicant contact the local fire jurisdiction to determine what local open burning requirements have been established, to obtain a local permit if required, and to follow all local adopted fire code requirements.”

Response #8: ADEQ thinks that this issue is adequately addressed by R18-2-602(I) which states that “[n]othing in this Section is intended to permit any practice which is a violation of any statute, ordinance, rule, or regulation.”

Comment #9: Commenter pointed out that ADEQ’s preamble to the proposed rule was inaccurate. The preamble suggested that a permit exemption for air curtain destructors was considered, under the federal regional haze rule, in order to remove an administrative barrier to certain types of burning. In fact, the regional haze rule requires removal of administrative barriers for *alternatives* to burning.

Response #9: ADEQ has retained and clarified the referenced paragraph in the preamble. The preamble now distinguishes between alternatives to burning and burning with a method that has lower emissions, but notes that removing an administrative barrier to either could be beneficial.

Comment #10: Commenter noted that subsection (D)(1)(a) allows construction burning with a permit. (A)(4) defines “construction burning” as including materials from “demolition or modification of any buildings” but precludes burning of “prohibited materials.” (A)(13) defines “prohibited materials” to include a number of common building materials, but that the list is not exhaustive and does not include other potentially harmful materials such as linoleum flooring, lead-painted wood, and composite counter-tops. He suggested adding such materials to (A)(13). Additionally, he suggested requiring a separate permit for the burning of building materials, as does Pinal County. Such a permit requires an on-site inspection before the permit is issued.

Response #10: ADEQ thinks that on-site inspections are an inefficient use of limited resources. However, the list of prohibited materials in R18-2-602(A)(13) can be expanded to include those items that commenter suggested.

Comment #11: Commenter noted that under subsection (D)(3)(g) permittees should know to make daily notifications of burning activity to the “local fire-fighting agency,” or to the State Forester. He thought it unclear whether “local fire-fighting agency” includes private fee-for-service firefighting corporations or is limited to municipal fire departments and local fire districts. Private for-profit services operate outside of jurisdictional limits and it is unclear how “operational bounds” of such services would be defined for the purposes of informing permittees whom to notify.

Response #11: ADEQ will clarify, in the rule, that private fee-for-service fire-fighting corporations are considered “local fire-fighting agencies” for the purpose of fulfilling notice requirements when such private services are delegated authorities as defined in R18-2-602(A)(6). In the absence of such a delegated authority, permittees would be required to notify the State Forester, as indicated by subsection (D)(3)(g).

Comment #12: Commenter noted that subsection (F) allows the permitting of household waste burning. Commenter thinks that such burning inevitably leads to nuisance and suggested that statutory authority to allow it does not equal legislative mandate, and therefore suggested that subsection (F) be deleted.

Response #12: ADEQ thinks it better to deal with the issue of household waste on an individual basis. Writing household waste entirely out of the rule would not allow for such individual assessment of each such burn. If the burning is likely to cause a nuisance, the application for that burn permit can be denied. Such nuisance is more likely to be an issue in urban counties than it would in rural. Therefore, ADEQ will retain subsection (F) in the rule of statewide application. Those counties with more urban development such as Maricopa, Pima, and Pinal, which have indepen-

Notices of Final Rulemaking

dent authority to permit fires, may prohibit such burning if they so choose, as is the case with the Maricopa county rules.

Comment #13: Commenter asserted that 40 CFR 51.308 and 51.309, the Regional Haze rule, refers to prescribed burning, which does not include fire-fighting training. Commenter listed a number of reasons how sections 308 and 309 do not apply to fires set for training purposes and stated that those fires should continue to be exempt from permit requirements.

Response #13: Without addressing the issue of whether or not 40 CFR 51.308 and 309 do apply to fires set for the purpose of conducting fire-fighting training, ADEQ has decided to exempt such fires from the open burning permit requirement while retaining the notice requirements that would allow ADEQ to track the relevant emissions data.

Comment #14: Commenter stated that the limitations, in subsection (D)(3)(c), set on the hours when permitted burns may be conducted unreasonably limit such fires to daylight hours. They claimed that in order to properly train their fire-fighters to combat fires arising from aircraft incidents, training must be conducted both day and night.

Response #14: Since ADEQ has decided to exempt fires set for training purposes from the permit requirement, subsection (D)(3)(c) no longer applies to such fires.

Comment #15: Commenter listed several practical problems that would make training difficult if they are required to apply for a permit from ADEQ for each training exercise.

Response #15: These issues should be adequately addressed by ADEQ's decision to continue to exempt training fires from the permit requirement. While ADEQ will retain a notice requirement to allow for the tracking and monitoring of necessary emissions data, it should be noted that this requirement can be filled by the filing of an annual report; it is unnecessary to report on a fire-by-fire basis.

Comment #16: Commenter expressed concern that the requirements of Article 15 relating to Burn Plans, Authorizations, and Accomplishment Forms will be a burdensome addition to his paperwork when conducting his own range management burns on his privately owned land. Commenter was uncertain of what the actual burden was on a private landowner.

Response #16: Under R18-2-1502, the provisions of this Article do not apply to private landowners conducting burns unless they enter into a memorandum of agreement with ADEQ. Private landowners conducting burns would be governed by the provisions of R18-2-602, Unlawful Open Burning. However, when a private landowner conducts a range management burn in cooperation with a State or Federal Land Manager, that Land Manager, not the private landowner, would be covered by the provisions of Article 15, Forest and Range Management Burns.

Comment #17: Commenter was concerned with the language used in R18-2-1503(C)(6) “[b]y area *planned* for wildland fire use,... and annual acres *to be* burned...” etc. (emphasis added). Commenter noted that wildland fires cannot, by virtue of their very nature, be planned, and asked if there is more appropriate language that might be used.

Response #17: ADEQ recognizes that wildland fires, or wildfires, cannot be accurately predicted. However, a wildland fire use, as defined in this rule, is a pre-planned event, and a wildland fire use may only take place in an area planned for it. The purpose of R18-2-1503(C)(6) is to get an estimate of the area, fuel types, and acreage that may be burned in a wildland fire use incident. ADEQ has clarified some language but kept the phrase “planned area.”

Comment #18: Commenter wondered how one should properly coordinate prescribed burning activities on federal land with adjacent private landowners.

Response #18: ADEQ considers this to be an operational issue not addressed in the scope of these rules, but is better dealt with at a practical level between the appropriate Land Manager and the private landowner.

Comment #19: Commenter asked if there is a definition of “nuisance” for R18-2-602(D)(3)(d)(iii).

Response #19: The definition of “nuisance” appropriate to this Section is to be found in A.R.S. § 13-2917, Public nuisance; abatement; classification.

Comment #20: Commenter asked whether the reporting requirement of R18-2-602(D)(3)(f) falls on the permit applicant or the delegated authority.

Notices of Final Rulemaking

Response # 20: While the specific forms dealing with these requirements are still being designed, the permit applicant would, under R18-2-602(D)(3)(g), notify the local fire-fighting agency or state forester of the burn. That official would, at that time, collect the necessary data to meet the reporting requirement of (D)(3)(f) which would then be reported to the Director or delegated authority in their daily or annual report.

Comment #21: Commenter suggested that it be clarified that fires using air curtain destructors are required to be permitted.

Response #21: Fires using air curtain destructors will be added to R18-2-602(D), Open Outdoor Fires Requiring a Permit, under subsection (D)(1).

Comment #22: Commenter expressed some confusion over whether, under R18-2-602(C)(4), all fires set by the federal government or any of its departments, agencies, or agents, etc., are exempt from the permit open outdoor fire permit requirement.

Response #22: Only those fires set by the federal government that would be regulated under Article 15, Forest and Range Management Burns, would be exempt from the requirements of R18-2-602, Unlawful Open Fires. ADEQ will change the language of subsection (C)(4) to better reflect the intention that such fires are to be governed by either the open burning rule, *or* the range management rules.

Comment #23: Commenter was concerned with the inclusion of “windrows” in R18-2-602(D)(3)(f)(iii) as an example of the fire types to be included in the permit reporting requirement. He suggested that such fires are dangerously unstable and would like mention of them to be removed from rule.

Response #23: ADEQ has removed “windrow” as an example and substituted “pit” in subsection (D)(3)(f)(iii).

12. Any other matters prescribed by statute that are applicable to the specific agency or to any other specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

Not applicable

14. Were these rules previously made as emergency rules?

No

15. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

**CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL**

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

Section

R18-2-602. Unlawful Open Burning

ARTICLE 15. FOREST AND RANGE MANAGEMENT BURNS

Section

R18-2-1501. Definitions

R18-2-1502. Applicability

R18-2-1503. Annual Registration, Program Evaluation and Planning for Prescribed Burns

R18-2-1504. Prescribed Burn Plan Contents

R18-2-1505. Prescribed Burn Requests and Authorization

R18-2-1506. Smoke Dispersion Evaluation

R18-2-1507. Prescribed Burn Accomplishment; ADEQ Recordkeeping; Wildfire Reporting

R18-2-1508. Prescribed Natural Fires; Wildland Fire Use; Plans; Authorizations; Monitoring; Interagency Consultation; Status Reporting

R18-2-1509. Emission Reduction Techniques; BMP

R18-2-1510. Smoke Management Techniques

R18-2-1511. R18-2-1511. Monitoring

R18-2-1512. R18-2-1512. Burner Qualifications

~~R18-2-1512, R18-2-1513. Public Notification and Awareness Program; Regional Coordination~~

~~R18-2-1514. Oversight~~

~~R18-2-1513, R18-2-1514. Surveillance and Enforcement~~

~~R18-2-1515. Forms; Electronic Copies; Information Transfers~~

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

R18-2-602. Unlawful Open Burning

- ~~**A.** Notwithstanding the provisions of any other rule in this Chapter, it is unlawful for any person to ignite, cause to be ignited, permit to be ignited, or suffer, allow or maintain any open outdoor fire.~~
- ~~**B.** "Open outdoor fire," as used in this rule, means any combustion of combustible material of any type outdoors, in the open where the products of combustion are not directed through a flue. "Flue," as used in this rule, means any duct or passage for air, gases or the like, such as a stack or chimney.~~
- ~~**C.** The following fires are excepted from the provisions of this rule:~~
- ~~1. Fires used only for cooking of food or for providing warmth for human beings or for recreational purposes or the branding of animals or the use of orchard heaters for the purpose of frost protection in farming or nursery operations.~~
 - ~~2. Any fire set or permitted by any public officer in the performance of official duty, if such fire is set or permission given for the purpose of weed abatement, the prevention of a fire hazard, or instruction in the methods of fighting fires.~~
 - ~~3. Fires set by or permitted by the state entomologist or county agricultural agents of the county for the purpose of disease and pest prevention.~~
 - ~~4. Fires set by or permitted by the federal government or any of its departments, agencies or agents, the state or any of its agencies, departments or political subdivisions, for the purpose of watershed rehabilitation or control through vegetative manipulation.~~
- ~~**D.** Permission for the setting of any fire given by a public officer in the performance of official duty under subsections (C)(2), (3), or (4) shall be given, in writing, and a copy of such written permission shall be transmitted immediately to the Director of the Department of Environmental Quality and the control officer, if any, of the county, district or region in which such fire is allowed. The setting of any such fire shall be constructed in a manner and at such time as approved by the Director, unless doing so would defeat the purpose of the exemption.~~
- ~~**E.** The following fires may be excepted from the provisions of this Section when permitted in writing by the Director of the Department of Environmental Quality or the control officer of the county, district or region in which such fire is allowed:~~
- ~~1. Fires set for the disposal of dangerous materials where there is no safe alternative method of disposal:
 - ~~a. "Dangerous material" is any substance or combination of substances which is able or likely to inflict bodily harm or property loss unless neutralized, consumed or otherwise disposed of in a controlled and safe manner.~~
 - ~~b. Fires set for the disposal of dangerous materials shall be permitted only when there is no safe alternative method of disposal, and when the burning of such materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts which will endanger health or safety.~~~~
 - ~~2. Open outdoor fires for the disposal of ordinary household trash in an approved waste burner in nonurban areas of less than 100 well spread out dwelling units per square mile where no refuse collection and disposal service is available:
 - ~~a. An "approved waste burner" is an incinerator constructed of fire resistant material with a cover or screen which is closed when in use having openings in the sides or top no greater than 1 inch in diameter.~~
 - ~~b. Open burning of the following materials is forbidden: Garbage resulting from the processing, storage, service or consumption of food; asphalt shingles; tar paper; plastic and rubber products (such as waste crankcase oil, transmission oil and oil filters); transformer oils; and hazardous material containers including those that contained inorganic pesticides, lead, cadmium, mercury, or arsenic compounds.~~~~
- ~~**F.** The Director of the Department of Environmental Quality or the air pollution control officer, if any, of the county, district, or region may delegate the authority for the issuance of allowable open burning permits to responsible local officers. Such permits shall contain conditions limiting the manner and the time of the setting of such fires as specified in the Arizona Guidelines for Open Burning and shall contain a provision that all burning be extinguished at the discretion of the Director or his authorized representative during periods of inadequate atmospheric smoke dispersion, periods of excessive visibility impairment which could adversely affect public safety, or periods when smoke is blown into populated areas so as to create a public nuisance. Any local officer delegated the authority for issuance of open burning permits shall maintain a copy of all currently effective permits issued including a means of contacting the person authorized by the permit to set an open fire in the event that an order for extinguishing of open burning is issued.~~
- ~~**G.** Nothing in this rule is intended to permit any practice which is a violation of any statute, ordinance, rule or regulation.~~
- ~~**A.** In addition to the definitions contained in A.R.S. § 49-501, in this Section:~~
- ~~1. "Agricultural burning" means burning vegetative materials related to producing and harvesting crops and raising animals for the purpose of marketing for profit, or providing a livelihood, but does not include burning of household waste or prohibited materials. A person may conduct agricultural burns in fields, piles, ditch banks, fence rows, or canal laterals for purposes such as weed control, waste disposal, disease and pest prevention, or site preparation.~~

Notices of Final Rulemaking

2. "Approved waste burner" means an incinerator constructed of fire resistant material with a cover or screen that is closed when in use, and has openings in the sides or top no greater than one inch in diameter.
3. "Class I Area" means any one of the Arizona mandatory federal class I areas defined in A.R.S. § 49-401.01.
4. "Construction burning" means burning wood or vegetative material from land clearing, site preparation, or fabrication, erection, installation, demolition, or modification of any buildings or other land improvements, but does not include burning household waste or prohibited material.
5. "Dangerous material" means any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.
6. "Delegated authority" means any of the following:
 - a. A county, city, town, air pollution control district, or fire district that has been delegated authority to issue open burning permits by the Director under A.R.S. § 49-501(E); or
 - b. A private fire protection service provider that has been assigned authority to issue open burning permits by one of the authorities in subsection (A)(6)(a).
7. "Director" means the Director of the Department of Environmental Quality, or designee.
8. "Emission reduction techniques" means methods for controlling emissions from open outdoor fires to minimize the amount of emissions output per unit of area burned.
9. "Flue," as used in this Section, means any duct or passage for air or combustion gases, such as a stack or chimney.
10. "Household waste" means any solid waste including garbage, rubbish, and sanitary waste from a septic tank that is generated from households including single and multiple family residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas, but does not include construction debris, landscaping rubble, or demolition debris.
11. "Independent authority to permit fires" means the authority of a county to permit fires by a rule adopted under Arizona Revised Statutes, Title 49, Chapter 3, Article 3, and includes only Maricopa, Pima, and Pinal counties.
12. "Open outdoor fire or open burning" means the combustion of material of any type, outdoors and in the open, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed, and construction burning, and fires using air curtain destructors.
13. "Prohibited materials" means nonpaper garbage from the processing, storage, service, or consumption of food; chemically treated wood; lead-painted wood; linoleum flooring, and composite counter-tops; tires; explosives or ammunition; oleanders; asphalt shingles; tar paper; plastic and rubber products, including bottles for household chemicals; plastic grocery and retail bags; waste petroleum products, such as waste crankcase oil, transmission oil, and oil filters; transformer oils; asbestos; batteries; anti-freeze; aerosol spray cans; electrical wire insulation; thermal insulation; polyester products; hazardous waste products such as paints, pesticides, cleaners and solvents, stains and varnishes, and other flammable liquids; plastic pesticide bags and containers; and hazardous material containers including those that contained lead, cadmium, mercury, or arsenic compounds.
14. "Residential burning" means open burning of vegetative materials conducted by or for the occupants of residential dwellings, but does not include burning household waste or prohibited material.
15. "Prescribed burning" has the same meaning as in R18-2-1501.
- B.** Unlawful open burning. Notwithstanding any other rule in this Chapter, a person shall not ignite, cause to be ignited, permit to be ignited, allow, or maintain any open outdoor fire in a county without independent authority to permit fires except as provided in A.R.S. § 49-501 and this Section.
- C.** Open outdoor fires exempt from a permit. The following fires do not require an open burning permit from the Director or a delegated authority:
 1. Fires used only for:
 - a. Cooking of food.
 - b. Providing warmth for human beings.
 - c. Recreational purposes.
 - d. Branding of animals.
 - e. Orchard heaters for the purpose of frost protection in farming or nursery operations, and
 - f. The proper disposal of flags under 4 U.S.C. 8.
 2. Any fire set or permitted by any public officer in the performance of official duty, if the fire is set or permission given for the following purpose:
 - a. Control of an active wildfire; or
 - b. Instruction in the method of fighting fires, except that the person setting these fires must comply with the reporting requirements of subsection (D)(3)(f).
 3. Fire set by or permitted by the Director of Department of Agriculture for the purpose of disease and pest prevention in an organized, area-wide control of an epidemic or infestation affecting livestock or crops.
 4. Prescribed burns set by or assisted by the federal government or any of its departments, agencies, or agents, or the state or any of its agencies, departments, or political subdivisions, regulated under Article 15 of this Chapter.

Notices of Final Rulemaking

D. Open outdoor fires requiring a permit.

1. The following open outdoor fires are allowed with an open burning permit from the Director or a delegated authority:
 - a. Construction burning;
 - b. Agricultural burning;
 - c. Residential burning;
 - d. Prescribed burns conducted on private lands without the assistance of a federal or state land manager as defined under R18-2-1501;
 - e. Any fire set or permitted by a public officer in the performance of official duty, if the fire is set or permission given for the purpose of weed abatement, or the prevention of a fire hazard, unless the fire is exempt from the permit requirement under subsection (C)(3);
 - f. Open outdoor fires of dangerous material under subsection (E);
 - g. Open outdoor fires of household waste under subsection (F); and
 - h. Open outdoor fires that use an air curtain destructor, as defined in R18-2-101.
2. A person conducting an open outdoor fire in a county without independent authority to permit fires shall obtain a permit from the Director or a delegated authority unless exempted under subsection (C). Permits may be issued for a period not to exceed one year. A person shall obtain a permit by completing an ADEQ-approved application form.
3. Open outdoor fire permits issued under this Section shall include:
 - a. A list of the materials that the permittee may burn under the permit;
 - b. A means of contacting the permittee authorized by the permit to set an open fire in the event that an order to extinguish the open outdoor fire is issued by the Director or the delegated authority;
 - c. A requirement that burns be conducted during the following periods, unless otherwise waived or directed by the Director on a specific day basis:
 - i. Year round: ignite fire no earlier than one hour after sunrise; and
 - ii. Year round: extinguish fire no later than two hours before sunset.
 - d. A requirement that the permittee conduct all open burning only during atmospheric conditions that:
 - i. Prevent dispersion of smoke into populated areas;
 - ii. Prevent visibility impairment on traveled roads or at airports that result in a safety hazard;
 - iii. Do not create a public nuisance or adversely affect public safety;
 - iv. Do not cause an adverse impact to visibility in a Class I area; and
 - v. Do not cause uncontrollable spreading of the fire;
 - e. A list of the types of emission reduction techniques that the permittee shall use to minimize fire emissions.
 - f. A reporting requirement that the permittee shall meet by providing the following information in a format provided by the Director for each date open burning occurred, on either a daily basis on the day of the fire, or an annual basis in a report to the Director or delegated authority due on March 31 for the previous calendar year:
 - i. The date of each burn;
 - ii. The type and quantity of fuel burned for each date open burning occurred;
 - iii. The fire type, such as pile or pit, for each date open burning occurred; and
 - iv. For each date open burning occurred, the legal location, to the nearest section, or latitude and longitude, to the nearest degree minute, or street address for residential burns.
 - g. A requirement that the person conducting the open burn notify the local fire-fighting agency or private fire protection service provider, if the service provider is a delegated authority, before burning. If neither is in existence, the person conducting the burn shall notify the state forester.
 - h. A requirement that the permittee start each open outdoor fire using items that do not cause the production of black smoke;
 - i. A requirement that the permittee attend the fire at all times until it is completely extinguished;
 - j. A requirement that the permittee provide fire extinguishing equipment on-site for the duration of the burn;
 - k. A requirement that the permittee ensure that a burning pit, burning pile, or approved waste burner be at least 50 feet from any structure;
 - l. A requirement that the permittee have a copy of the burn permit on-site during open burning;
 - m. A requirement that the permittee not conduct open burning when an air stagnation advisory, as issued by the National Weather Service, is in effect in the area of the burn or during periods when smoke can be expected to accumulate to the extent that it will significantly impair visibility in Class I areas;
 - n. A requirement that the permittee not conduct open burning when any stage air pollution episode is declared under R18-2-220.
 - o. A statement that the Director, or any other public officer, may order that the burn be extinguished or prohibit burning during periods of inadequate smoke dispersion, excessive visibility impairment, or extreme fire danger; and
 - p. A list of the activities prohibited and the criminal penalties provided under A.R.S. § 13-1706.

Notices of Final Rulemaking

4. The Director or a delegated authority shall not issue an open burning permit under this Section:
 - a. That would allow burning prohibited materials other than under a permit for the burning of dangerous materials;
 - b. If the applicant has applied for a permit under this Section to burn a dangerous material which is also hazardous waste under 40 CFR 261, but does not have a permit to burn hazardous waste under 40 CFR 264, or is not an interim status facility allowed to burn hazardous waste under 40 CFR 265; or
 - c. If the burning would occur at a solid waste facility in violation of 40 CFR 258.24 and the Director has not issued a variance under A.R.S. § 49-763.01.
- E. Open outdoor fires of dangerous material. A fire set for the disposal of a dangerous material is allowed by the provisions of this Section, when the material is too dangerous to store and transport, and the Director has issued a permit for the fire. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The Director shall permit fires for the disposal of dangerous materials only when no safe alternative method of disposal exists, and burning the materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts that will endanger health or safety.
- F. Open outdoor fires of household waste. An open outdoor fire for the disposal of household waste is allowed by provisions of this Section when permitted in writing by the Director or a delegated authority. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The permittee shall conduct open outdoor fires of household waste in an approved waste burner and shall either:
 1. Burn household waste generated on-site on farms or ranches of 40 acres or more where no household waste collection or disposal service is available; or
 2. Burn household waste generated on-site where no household waste collection and disposal service is available and where the nearest other dwelling unit is at least 500 feet away.
- G. Permits issued by a delegated authority. The Director may delegate authority for the issuance of open burning permits to a county, city, town, air pollution control district, or fire district. A delegated authority may not issue a permit for its own open burning activity. The Director shall not delegate authority to issue permits to burn dangerous material under subsection (E). A county, city, town, air pollution control district, or fire district with delegated authority from the Director may assign that authority to one or more private fire protection service providers that perform fire protection services within the county, city, town, air pollution control district, or fire district. A private fire protection provider shall not directly or indirectly condition the issuance of open burning permits on the applicant being a customer. Permits issued under this subsection shall comply with the requirements in subsection (D)(3) and be in a format prescribed by the Director. Each delegated authority shall:
 1. Maintain a copy of each permit issued for the previous five years available for inspection by the Director;
 2. For each permit currently issued, have a means of contacting the person authorized by the permit to set an open fire if an order to extinguish open burning is issued; and
 3. Annually submit to the Director by May 15 a record of daily burn activity, excluding household waste burn permits, on a form provided by the Director for the previous calendar year containing the information required in subsections (D)(3)(e) and (D)(3)(f).
- H. The Director shall hold an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.
- I. Nothing in this Section is intended to permit any practice that is a violation of any statute, ordinance, rule, or regulation.

ARTICLE 15. FOREST AND RANGE MANAGEMENT BURNS

R18-2-1501. Definitions

In addition to the definitions contained in A.R.S. § 49-501 and R18-2-101, in this Article:

1. “Activity fuels” means those fuels created by human activities such as thinning or logging.
- ~~2.~~ “ADEQ” means the Department of Environmental Quality.
3. “Annual emissions goal” means the annual establishment in cooperation with the F/SLMs, under R18-2-1503(G), of a planned quantifiable value of emissions reduction from prescribed fires and fuels management activities.
2. “BMP” means best management practices as described in R18-2-1509.
4. “Burn plan” means the ADEQ form that includes information on the conditions under which a burn will occur with details of the burn and smoke management prescriptions.
- ~~3-5.~~ “Burn prescription” means, with regard to a burn project, the pre-determined area, intensity of heat, and rate of spread fuel, and weather conditions required to attain planned resource management objectives.
- ~~4-6.~~ “Burn project” means an active or planned prescribed burn, including a prescribed natural fire wildland fire use incident.
5. “Class I Area” means a mandatory area designated pursuant to Section 169A of the Clean Air Act Amendments of 1990.
- ~~6-7.~~ “Duff” means forest floor material consisting of decomposing needles and other natural materials.
8. “Emission reduction techniques (ERT)” means methods for controlling emissions from prescribed fires to minimize the amount of emission output per unit of area burned.

Notices of Final Rulemaking

- ~~7-9.~~ “Federal land manager (FLM)” means any department, agency, or agent of the federal government, including the following:
- a. United States Forest Service,
 - b. United States Fish and Wildlife Service,
 - c. National Park Service,
 - d. Bureau of Land Management,
 - e. Bureau of Reclamation,
 - f. Department of Defense,
 - g. Bureau of Indian Affairs, and
 - h. ~~United States Soil Conservation Service.~~ Natural Resources Conservation Service.
- ~~8-10.~~ “F/SLM” means a federal land manager or a state land manager.
- ~~9-11.~~ “Local fire management officer” means a person designated by a F/SLM as responsible for fire management in a local district or area.
- ~~10-12.~~ “Mop-up” means the act of extinguishing or removing burning material from a prescribed fire to reduce smoke impacts.
- ~~11-13.~~ “National Wildfire Coordinating Group” means the national inter-agency group of federal and state land managers that shares similar wildfire suppression programs and has established standardized inter-agency training courses and qualifications for fire management positions.
14. “Non-burning alternatives to fire” means techniques that replace fire for at least five years as a means to treat activity fuels created to achieve a particular land management objective (e.g., reduction of fuel-loading, manipulation of fuels, enhancement of wildlife habitat, and ecosystem restoration). These alternatives are not used in conjunction with fire. Techniques used in conjunction with fire are referred to as emission reduction techniques (ERTs).
- ~~12-15.~~ “Planned resource management objectives” means public interest goals in support of land management agency objectives including silviculture, wildlife habitat management, grazing enhancement, fire hazard reduction, wilderness management, cultural scene maintenance, weed abatement, watershed rehabilitation, vegetative manipulation, and disease and pest prevention.
- ~~13-16.~~ “Prescribed burning” means the controlled application of fire to wildland fuels that are in either a natural or modified state, under certain burn ~~prescription conditions~~ and smoke management prescription conditions that have been specified by the land manager in charge of or assisting the burn, to attain planned resource management objectives. Prescribed burning includes does not include a fire set or permitted by a public officer to provide instruction in fire fighting methods, or construction or residential burning under R18-2-602. A prescribed fire may be ignited either by a trained fire specialist or by natural causes such as lightning.
- ~~14-17.~~ “Prescribed fire manager” means a person designated by a F/SLM as responsible for prescribed burning for that land manager.
15. “Prescribed natural fire” means a wildland fire that is ignited by natural causes such as lightning rather than by a trained fire specialist, that is subsequently allowed to continue burning using the same controls and for the same planned resource management objectives as prescribed burning.
- ~~16-18.~~ “Smoke management prescription” means the predetermined meteorological conditions that affect smoke transport and dispersion under which a burn could occur without adversely affecting public health and welfare.
19. “Smoke management techniques” (SMT) means management and dispersion practices used during a prescribed burn or wildland fire use incident which affect the direction, duration, height, or density of smoke.
- ~~17-20.~~ “Smoke management unit” means any of ~~the~~ the geographic areas defined by ADEQ whose area is based on primary watershed boundaries and whose ~~outlines are~~ outline is determined by diurnal windflow patterns that allow smoke to follow predictable drainage patterns. A map of the state divided into ~~the~~ the smoke management units is on file with ADEQ.
- ~~18-21.~~ “State land manager (SLM)” means any department, agency, or political subdivision of the state government ~~that is responsible for wildland management including the following:~~
- a. State Land Department.
 - b. Department of Transportation.
 - c. Department of Game and Fish, and
 - d. Parks Department.
- ~~19-22.~~ “Wildfire” means ~~a~~ an unplanned wildland fire subject to appropriate control measures that does not meet resource management objectives and that may threaten life, property, public health, or the ecosystem. Wildfires include those incidents where suppression may be limited for safety, economic, or resource concerns.
20. “Wildland” means an area in which development is essentially non-existent, except for pipelines, power lines, roads, railroads, or other transportation or conveyance facilities.
23. “Wildland fire use” means a wildland fire that is ignited by natural causes, such as lightning, and is managed using the same controls and for the same planned resource management objectives as prescribed burning.

Notices of Final Rulemaking

R18-2-1502. Applicability

- A. A F/SLM that is conducting or assisting a prescribed burn shall follow the requirements of this Article.
- B. A private or municipal burner with whom ADEQ has entered into a memorandum of agreement shall follow the requirements of this Article.
- ~~B.C.~~ The provisions of this Article apply to all areas of the state except Indian Trust lands. All federally-managed lands and all state lands, parks, and forests are under the jurisdiction of ADEQ in matters relating to air pollution from prescribed burning.
- ~~C.D.~~ Notwithstanding subsection ~~(B)~~ (C), ADEQ and any Indian tribe may enter into a memorandum of agreement to implement this Article.
- E. ADEQ and any private or municipal prescribed burner may enter into a memorandum of agreement to implement this Article.

R18-2-1503. Annual Registration, Program Evaluation and Planning for Prescribed Burns

- A. Each F/SLM shall register annually with ADEQ; on a form prescribed by ADEQ, all planned burn projects, including areas ~~considered for potential prescribed natural fires planned for wildland fire use,~~ for the following year.
- ~~C.B.~~ Each planned year extends from ~~August~~ January 1 of the registration year to ~~July~~ December 31 of the same ~~following~~ year. Each F/SLM shall use best efforts to register before ~~August~~ December 31 and no later than January 31 of each year.
- ~~B.C.~~ A F/SLM shall ~~provide~~ include the following information on the registration form:
 - 1. The F/SLM's name, address, and business telephone number;
 - 2. The name, address, and business telephone number of an air quality representative who will provide technical support to ADEQ for decisions regarding prescribed burning. The same air quality representative may be selected by more than one F/SLM ~~or Indian tribe~~;
 - 3. All prescribed burn projects and potential prescribed natural fire wildland fire use areas planned for the next year; ~~and~~
 - 4. Maximum project and annual acres to be burned, maximum daily acres to be burned, fuel types within project area, and planned use of emission reduction techniques to support the annual emissions goal for each prescribed burn project;
 - 5. Planned use of any smoke management techniques for each prescribed burn project;
 - 6. Maximum project and annual acres projected to be burned, maximum daily acres projected to be burned, and a map of the anticipated project area, fuel types and loading within the planned area for an area the F/SLM anticipates for wildland fire use;
 - ~~4.7.~~ A list of all burn projects that were completed during the previous year;
 - 8. Project area for treatment, treatment type, fuel types to be treated, and activity fuel loading to support the annual emissions goal for areas to be treated using non-burning alternatives to fire; and
 - 9. The area treated using non-burning alternatives to fire during the previous year including the number of acres, the specific types of alternatives utilized, and the location of these areas.
- D. After consultation with the F/SLM, ADEQ may request additional information ~~related to tracking burn projects for registration of prescribed burns and wildland fire use to support regional coordination of smoke management, annual emission goal setting using ERTs, and non-burning alternatives to fire.~~
- E. A F/SLM may amend a registration at any time with a written submission to ADEQ. ~~ADEQ shall approve a new prescribed burn even if the F/SLM has failed to amend a registration if the F/SLM has complied with the other provisions of this Article.~~
- F. ADEQ ~~shall accept~~ accepts a facsimile or other electronic method as a means of complying with the deadline for registration. If an electronic means is used a facsimile is submitted, the F/SLM shall deliver the original paper registration form to ADEQ for its records. ADEQ shall acknowledge in writing the receipt of each registration. ~~If ADEQ and the F/SLMs jointly develop an electronic filing and reporting system, the original paper form may be waived, and ADEQ shall notify all F/SLMs of this change.~~
- ~~G.~~ No later than 14 days before a F/SLM requests permission to proceed with a registered burn project other than a prescribed natural fire, the F/SLM shall submit a Burn Plan to ADEQ, as described in R18-2-1504. ~~A Burn Plan for a prescribed natural fire shall be submitted as prescribed by R18-2-1508.~~
- ~~G.~~ ADEQ shall hold a meeting after January 31 and before April 1 of each year between ADEQ and F/SLMs to evaluate the program and cooperatively establish the annual emission goal. The annual emission goal shall be developed to minimize prescribed fire emissions to the maximum extent feasible using emission reduction techniques and alternatives to burning subject to economic, technical, and safety feasibility criteria, and consistent with land management objectives.
- ~~H.~~ At least once every five years, ADEQ shall request long-term projections of future prescribed fire and wildland fire use activity from the F/SLMs to support planning for visibility impairment and assessment of other air quality concerns by ADEQ.

Notices of Final Rulemaking

R18-2-1504. Prescribed Burn Plan Contents

- ~~A.~~ Each F/SLM planning a prescribed burn ~~other than a prescribed natural fire~~, shall complete and submit to ADEQ the "Burn Plan" form supplied by ADEQ no later than 14 days before the date on which the F/SLM requests permission to burn. ADEQ shall consider the information supplied on the Burn Plan Form as binding conditions under which the burn shall be conducted. A Burn Plan shall be maintained by ADEQ until notification from the F/SLM of the completion of the burn project. Revisions to the Burn Plan for a burn project shall be submitted in writing no later than 14 days before the date on which the F/SLM requests permission to burn. The F/SLM shall provide the following information on the "Burn Plan" form: To facilitate the Daily Burn authorization process under R18-2-1505, the F/SLM shall include on the Burn Plan form:
1. An emergency telephone number that is answered 24 hours a day, seven days a week;
 2. Burn prescription;
 3. Smoke management prescription;
 4. The number of acres to be burned, the quantity and type of fuel, type of burn, and the ignition technique to be used;
 5. The land management objective or purpose for the burn such as restoration or maintenance of ecological function and indicators of fire resiliency;
 - ~~5-6.~~ A map depicting the potential impact of the smoke unless waived either orally or in writing by ADEQ. The potential impact shall be determined by mapping both the daytime and nighttime smoke path and down-drainage flow for 15 miles from the burn site, with smoke-sensitive areas delineated. The map shall use the appropriate scale to show the impacts of the smoke adequately;
 - ~~6-7.~~ Modeling of smoke impacts unless waived either orally or in writing by ADEQ, for burns greater than 250 acres per day, or greater than 50 acres per day if the burn is within 15 miles of a Class I Area, an area that is non-attainment for particulates, a carbon monoxide non-attainment area, or other smoke-sensitive area. Air quality modeling for these areas is mandatory unless waived either verbally or in writing by ADEQ. In consultation with the F/SLM, ADEQ shall provide guidelines on modeling;
 - ~~7-8.~~ The name of the official submitting the Burn Plan on behalf of the F/SLM; and
 - ~~8-9.~~ After consultation with the F/SLM, any other information to support the Burn Plan needed by ADEQ to assist in the Daily Burn authorization process for smoke management purposes or assessment of contribution to visibility impairment of Class I areas.
- ~~B.~~ A Burn Plan shall be submitted for a prescribed natural fire as prescribed by R18-2-1508.

R18-2-1505. Prescribed Burn Requests and Authorization

- A. Each F/SLM planning a prescribed burn, ~~other than a prescribed natural fire~~, shall complete and submit to ADEQ the "Daily Burn Request" form supplied by ADEQ. ~~The F/SLM shall include the following information on the Daily Burn Request form shall include:~~
1. The contact information of the F/SLM conducting the burn;
 2. Each day of the burn;
 - ~~2-3.~~ The area to be burned per on the day for which the Burn Request is submitted, with reference to the Burn Plan, including size, ~~and~~ legal location to the section, and latitude and longitude to the minute;
 4. Projected smoke impacts; and
 - ~~3-5.~~ Any local conditions or circumstances known to the F/SLM that, if conveyed to ADEQ, could impact the Daily Burn authorization process.
- B. After consultation with the F/SLM, ADEQ may request additional information related to the burn, meteorological, smoke dispersion, or air quality conditions to supplement the Daily Burn Request form and to aid in the Daily Burn authorization process. ~~This information may include same day on-site and area meteorological, smoke dispersion, or air quality measurements.~~
- C. The F/SLM shall submit the Daily Burn Request form to ADEQ as expeditiously as practicable, but no later than 2:00 p.m. of the business day preceding the burn. An original form, a facsimile, or an electronic information transfer are acceptable submittals.
- D. An F/SLM shall not ignite a prescribed burn without receiving the approval of ADEQ, as follows:
- ~~D-1.~~ ADEQ shall approve, approve with conditions, or disapprove a burn on the same business day as the Burn Request submittal.
 2. If ADEQ fails to address a Burn Request by 10:00 p.m. of the business day on which the request is submitted, the Burn Request is approved by default after the burner makes a good faith effort to contact ADEQ to confirm that the Burn Request was received.
 3. ADEQ may communicate its decision by verbal, written, or electronic means. ADEQ shall provide a written or electronic reply if requested by the F/SLM. ~~If ADEQ does not communicate its decision, or a confirmation that the Burn Request was received, by 10 p.m., the burn is deemed approved.~~
- ~~E.~~ ~~Except as provided in subsection (D), an F/SLM shall not ignite a prescribed burn without receiving the approval of ADEQ.~~

Notices of Final Rulemaking

- ~~F.E.~~ If weather conditions cease to conform to those in the smoke management prescription of either the Burn Plan or an Approval with Conditions, the F/SLM shall ~~cease ignitions and~~ take appropriate action to reduce further smoke impacts, ensure safe and appropriate fire control, and notify the public when necessary, ~~unless after~~ After consultation with ADEQ, the smoke management prescription or burn plan may be ~~is~~ modified.
- ~~F.~~ The F/SLM shall ensure that there is appropriate signage and notification to protect public safety on transportation corridors including roadways and airports during a prescribed fire.
- ~~G.~~ Burn authorization for prescribed natural fires shall be as prescribed by R18-2-1508.
- ~~H.~~ The F/SLM in whose jurisdiction a wildfire occurs shall report all wildfires greater than 100 acres on a daily basis to ADEQ. The F/SLM shall include in the report the location, estimated control date, and estimated incident size of each wildfire. The F/SLM shall provide information on projected smoke and air quality impacts and on estimated control size upon request by ADEQ.

R18-2-1506. Smoke Dispersion Evaluation

ADEQ shall approve, approve with conditions, or disapprove a Daily Burn Request submitted pursuant to under R18-2-1505, by using the following factors for each smoke management unit:

1. Analysis of the emissions from burns in progress and residual emissions from previous burns on a day-to-day basis;
2. Analysis of emissions from active ~~prescribed natural fires wildland fire use incidents, and active multiple-day burns,~~ and consideration of potential long-term emissions estimates;
3. Analysis of the emissions from wildfires greater than 100 acres and consideration of their potential long-term growth;
4. Local burn conditions;
5. Burn prescription and smoke management prescription from the applicable Burn Plan;
6. Existing and predicted local air quality;
7. Local and synoptic meteorological conditions;
8. Type and location of areas to be burned;
9. Protection of the national visibility goal for Class I Areas pursuant to under § 169A(a)(1) of the Act and 40 CFR 51.309; and
10. Assessment of duration and intensity of smoke emissions to minimize cumulative impacts;
- ~~10-11.~~ Minimization of smoke impacts in Class I Areas, roads or highways, airports, areas that are non-attainment for particulate matter, carbon monoxide non-attainment areas, or other smoke-sensitive areas; and
12. Protection of the National Ambient Air Quality Standards.

R18-2-1507. Prescribed Burn Accomplishment; ~~ADEQ Recordkeeping;~~ Wildfire Reporting

- A. Each F/SLM conducting a prescribed burn shall complete and submit to ADEQ the "Burn Accomplishment" form supplied by ADEQ. For each burn approval, the F/SLM shall submit a Burn Accomplishment form to ADEQ by 2:00 p.m. of the business day following the approved burn. The F/SLM shall include the following information on the Burn Accomplishment form:
 1. Any known conditions or circumstances that could impact the Daily Burn decision process;
 2. The ~~subsequent~~ date, location, fuel type, fuel loading, and acreage accomplishments;
 3. The ~~BMP ERTs and SMTs for emission reduction~~ described in R18-2-1509 and R18-2-1510, respectively, and may include any further ERTs and SMTs that become available, that the F/SLM used to reduce emissions or manage the smoke from the burn.
- ~~B.~~ For each burn approval, the F/SLM shall submit a Burn Accomplishment form to ADEQ by 2 p.m. of the business day following the approved burning.
- ~~C.B.~~ The F/SLM shall submit the Burn Accomplishment form as an original form, a facsimile, or an electronic information transfer.
- ~~D.C.~~ ADEQ shall maintain a record of Burn Requests, Burn Approvals/Conditional Approvals/Denials and Burn Accomplishments for ~~5~~ five years.
- ~~D.~~ The F/SLM in whose jurisdiction a wildfire occurs shall make available to ADEQ no later than the day after the activity all required information for wildfire incidents that burned more than 100 acres per day in timber or slash fuels or 300 acres per day in brush or grass fuels. For each day of a wildfire incident that exceeds the daily activity threshold, the F/SLM shall provide the location, an estimate of predominant fuel type and quantity consumed, and an estimate of the area blackened that day.

R18-2-1508. ~~Prescribed Natural Fires;~~ Wildland Fire Use; Plan~~s~~; Authorization~~s~~; Monitoring; Inter-agency Consultation; Status Reporting

- A. In order for ADEQ to participate in the wildland fire use decision-making process, the A F/SLM shall notify ADEQ as soon as practicable of any potential wildland fire use incident prescribed natural fire when it is projected to attain or attaining a size of 50 acres of timber fuel or 250 acres of brush or grass fuel.
- B. For each ~~wildland fire use incident prescribed natural fire~~ that has been declared as such by the F/SLM, the F/SLM shall complete and submit to ADEQ a Wildland Fire Use Burn prescribed natural fire Plan in a format approved by ADEQ in cooperation with the F/SLM. The F/SLM shall submit the Wildland Fire Use Burn prescribed natural fire Plan to ADEQ

Notices of Final Rulemaking

as soon as practicable but no later than 72 hours after the wildland fire use incident prescribed natural fire is declared or under consideration for such designation ~~is observed~~. The F/SLM shall include the following information in the Wildland Fire Use Burn prescribed natural fire Plan:

1. An emergency telephone number that is answered 24 hours a day, seven days a week;
 2. Anticipated burn prescription and anticipated emissions;
 3. Anticipated smoke management prescription;
 - ~~3-4.~~ The estimated daily anticipated growth in the number of acres, quantity, and type of fuel to be potentially burned;
 - ~~4-5.~~ The anticipated maximum allowable perimeter or size with map;
 - ~~5-6.~~ The type or types of fuel involved; Information on the condition of the area to be burned, such as whether it is in maintenance or restoration, its ecological function, and other indicators of fire resiliency;
 - ~~6-7.~~ The anticipated duration of the wildland fire use incident prescribed natural fire;
 - ~~7-8.~~ The anticipated long-range weather trends for the site onsite;
 - ~~8-9.~~ A map depicting the potential impact of the smoke. The potential impact shall be determined by mapping both the daytime and nighttime smoke path and down-drainage flow for 15 miles from the wildland fire use incident burn site, with smoke-sensitive areas delineated. Mapping is mandatory unless waived either orally or in writing by ADEQ. The map shall use the appropriate scale to show the impacts of the smoke adequately; The map shall use the standard agency scale for that F/SLM; and
 - ~~9-10.~~ Modeling or monitoring of smoke impacts, if requested by ADEQ after consultation with the F/SLM.
- C. ADEQ shall approve or disapprove a Wildland Fire Use Burn prescribed natural fire Plan within ~~3~~ three hours of receipt. ADEQ shall consult directly with the requesting F/SLM before disapproving a Wildland Fire Use Burn prescribed natural fire Plan. If ADEQ fails to address the Wildland Fire Use Burn Plan within the time allotted, the Plan is approved by default under the condition that the F/SLM makes a good faith effort to contact ADEQ to confirm that the Plan was received. If ADEQ fails to respond to the submittal of the prescribed natural fire Plan, approval of the prescribed natural fire may be assumed by the F/SLM. Approval by ADEQ of a Wildland Fire Use Burn prescribed natural fire Plan shall be is binding upon ADEQ for the duration of the wildland fire use incident prescribed natural fire project, unless smoke from the incident prescribed natural fire creates a threat to public health or welfare. If a threat to public health or welfare is created, ADEQ shall consult with the F/SLM regarding the situation and ~~the development of~~ develop a joint action plan for reducing further smoke impacts.
- D. The F/SLM shall submit a Daily Status Report for each wildland fire use incident prescribed natural fire to ADEQ for each day of the burn that the fire burns more than 100 acres in timber or slash fuels or 300 acres in brush or grass fuels ~~perimeter increases~~. The F/SLM shall include a synopsis of smoke behavior, future daily anticipated growth, and location of the activity of the wildland fire use incident prescribed natural fire in the Daily Status Report.
- E. The F/SLM shall consult with ADEQ prior to initiating human-made ignition on the wildland fire use incident when greater than 250 acres is anticipated to be burned by the ignition. Emergency human-made ignition on the incident for protection of public or fire-fighter safety does not require consultation with ADEQ regardless of the size of the area to be burned.
- F. The F/SLM shall ensure that there is appropriate signage and notification to protect public safety on transportation corridors including roadways and airports during a wildland fire use incident.

R18-2-1509. Emission Reduction Techniques; ~~BMP~~

- A. Each F/SLM conducting a prescribed burn shall implement as many Emission Reduction Techniques BMP ~~for emission reduction~~ as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives, for the specific burn and shall include the BMP in the Burn Accomplishment submitted pursuant to R18-2-1507.
- B. The following measures are considered Emission Reduction Techniques include BMP:
1. Reducing biomass to be burned by use of techniques such as yarding or consolidation of unmerchandisable material, multi-product timber sales, or public firewood access, when economically feasible. When allowing public firewood access, provide information on the adverse impacts of using green or wet wood as fuel;
 - ~~2.~~ Burning in seasons characterized by meteorological conditions that allow for good smoke dispersion, especially March 15 through September 15;
 2. Reducing biomass to be burned by fuel exclusion practices such as preventing the fire from consuming dead snags or dead and downed woody material through lining, application of fire-retardant foam, or water;
 3. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires of high fuel density areas such as logging slash decks with short duration impacts;
 4. Igniting burns under good to excellent ventilation conditions and suspending operations under poor smoke dispersion conditions;
 5. Considering smoke impacts on local community activities and land users;
 - ~~6-4.~~ Burning only fuels essential fuels to meet resource management objectives;
 - ~~7-5.~~ Minimizing duff consumption and smoldering by burning under conditions of high through fuel moisture of duff and litter considerations;

Notices of Final Rulemaking

6. Minimizing fuel consumption and smoldering by burning under conditions of high fuel moisture of large woody fuels;
- ~~8-7. Minimizing dirt soil content when slash piles are constructed by using brush blades on material-moving equipment and by constructing piles under dry soil conditions or by using hand piling methods;~~
8. Burning fuels in piles;
- ~~9. Burning piles when other burns are not feasible, such as when snow or rain is present;~~
9. Using a backing fire in grass fuels;
- ~~10. Using all opportunities that meet the burn prescription and all burn locations to spread smoke impacts over a broader time period and geographic area;~~
10. Burning fuels with an air curtain destructor, as defined in R18-2-101, operated according to manufacturer specifications and meeting applicable state or local opacity requirements;
- ~~11. Burning during optimum mid-day dispersion hours, with all ignitions in a burn unit completed by 3 p.m. to prevent trapping smoke in inversions or diurnal windflow patterns;~~
11. Extinguishing or mopping-up of smoldering fuels;
- ~~12. Using chunking~~ Chunking of piles and other consolidations of burning material to enhance flaming and fuel consumption, and to minimize smoke production;
- ~~13. Implementing maintenance burning in a periodic rotation mimicking natural fire cycles to reduce excessive fuel accumulations and subsequent excessive smoke production through smoldering or wildfire;~~
13. Burning before litter fall;
- ~~14. Using prescribed natural fires and unplanned ignitions; and~~
14. Burning before green-up of fuels;
15. Managing smoke impacts as follows:
 - a. Limiting smoke impacts to roads, highways, and airports to the amounts, frequencies, and durations consistent with any guidance provided by highway and airport personnel;
 - b. Using appropriate signing if smoke will impact any roadways;
 - c. Notifying control towers if smoke will intrude in any air traffic control zone;
 - d. Determining nighttime impacts and taking appropriate precautions; and
 - e. Contacting appropriate authorities as needed regarding smoke or visibility impacts.
15. Burning before recently cut large fuels cure in areas with activity; and
16. Burning just before precipitation to reduce fuel smoldering and consumption.

R18-2-1510. Smoke Management Techniques

- A. Each F/SLM conducting a prescribed burn shall implement as many Smoke Management Techniques as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives.
- B. Smoke management techniques include:
 1. Burning from March 15 through September 15, when meteorological conditions allow for good smoke dispersion;
 2. Igniting burns under good-to-excellent ventilation conditions;
 3. Suspending operations under poor smoke dispersion conditions;
 4. Considering smoke impacts on local community activities and land users;
 5. Burning piles when other burns are not feasible, such as when snow or rain is present;
 6. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires with short duration impacts;
 7. Using all opportunities that meet the burn prescription and all burn locations to spread smoke impacts over a broader time period and geographic area;
 8. Burning during optimum mid-day dispersion hours, with all ignitions in a burn unit completed by 3:00 p.m. to prevent trapping smoke in inversions or diurnal windflow patterns;
 9. Providing information on the adverse impacts of using green or wet wood as fuel when public firewood access is allowed;
 10. Implementing maintenance burning in a periodic rotation to shorten prescribed fire duration and to reduce excessive fuel accumulations that could result in excessive smoke production in a wildfire; and
 11. Using wildland fire-use strategies to shift smoke into more favorable smoke dispersion seasons.

R18-2-1510. R18-2-1511. Monitoring

- A. ADEQ may require a F/SLM to monitor weather and air quality before or during a prescribed burn or a ~~excluding wildland fire use incident~~ prescribed natural fires, which are governed by R18-2-1508; if necessary to accurately predict assess smoke impacts. Air quality monitoring may be conducted using both federal and non-federal reference method as well as other techniques.
- B. ADEQ may require a F/SLM to monitor weather before or during a prescribed burn or a wildland fire use incident, if necessary to predict or assess smoke impacts. After consultation with the F/SLM, ADEQ may also require the F/SLM to establish burn site or area-representative remote automated weather stations or their equivalent, having telemetry that

Notices of Final Rulemaking

allows retrieval on a real-time basis by ADEQ. An F/SLM shall give ADEQ notice and an opportunity to comment before making any change to a long-term established remote automated weather station.

~~B.C.~~ A F/SLM shall employ the following types of monitoring, unless waived by ADEQ, for burns greater than 250 acres per day, or greater than 50 acres per day if the burn is within 15 miles of a Class I Area, an area that is non-attainment for particulate matter, a carbon monoxide, or ozone non-attainment area, or other smoke-sensitive area:

1. Smoke plume measurements, using a format supplied by ADEQ; and

~~1.2.~~ The release of pilot balloons (PIBALs) at the burn site to verify needed wind speed, direction, ~~or~~ and stability; ~~and~~

2. ~~Smoke plume measurements, using a format supplied by ADEQ.~~

Instead of pilot balloons, a test burn at the burn site may be used for specific prescribed burns on a case-by-case basis as approved by ADEQ, to verify needed wind speed, direction, and stability.

~~C.D.~~ An F/SLM shall make monitoring information required pursuant to under subsection (B)(C) available to ADEQ on the business day following the burn ignition.

~~D.~~ After consultation with the F/SLM, ADEQ may also require the F/SLM to establish burn site or area representative remote automated weather stations or their equivalent, having telemetry that allows retrieval on a real-time basis by ADEQ, if necessary to accurately predict smoke impacts.

E. The F/SLM shall keep on file for ~~+~~ one year following the burn date any monitoring information required ~~pursuant to~~ under this Section.

~~R18-2-1511. R18-2-1512. Burner Qualifications~~

A. All ~~burns~~ burn projects shall be conducted by personnel trained in prescribed fire and smoke management techniques ~~to the minimum level as required by the F/SLM in charge of the burn and established by National Wildfire Coordinating Group training qualifications.~~

B. A Prescribed Fire ~~Manager~~ Boss or other local Fire Management Officer of the F/SLM having jurisdiction over prescribed burns shall have smoke management training obtained through one of the following:

1. Successful completion of a National Wildfire Coordinating Group or F/SLM-equivalent course ~~dedicated to address-~~ ing smoke management; or

2. Attendance at an ADEQ-approved smoke management workshop.

~~R18-2-1512. R18-2-1513. Public Notification and Awareness Program; Regional Coordination~~

~~A.~~ At the Director's discretion, The Director shall conduct a public education and awareness program may be conducted by ADEQ in cooperation with F/SLMs and other interested parties to inform the general public of the smoke management program described by this Article. If conducted, the The program shall include smoke impacts from prescribed fires and the role of prescribed fire in natural ecosystems.

~~B.~~ ADEQ shall make annual registration, prescribed burn approval, and wildfire and wildland fire use activity information readily available to the public and to facilitate regional coordination efforts and public notification.

~~R18-2-1514. Oversight~~

~~A.~~ An F/SLM planning to make a change to any long-term established remote automated weather station shall give ADEQ notice and an opportunity to comment before making the change.

~~B.~~ On or before August 15 of each year, each F/SLM shall submit to ADEQ a report generally describing each of the following:

1. ~~The emissions reductions for each project from the previous year as a result of using BMP. Emissions reductions may be estimated using methods and emission factors developed jointly by ADEQ and F/SLMs;~~

2. ~~The smoke management cost estimates for each active project from the previous year including estimates for monitoring, training, applying emission reduction techniques, research, and compliance with the requirements of this Article; and~~

3. ~~Any research on or development of innovative techniques for emission reductions.~~

~~R18-2-1513. R18-2-1514. Surveillance and Enforcement~~

A. An F/SLM conducting a prescribed burn shall permit ADEQ to enter and inspect burn sites unannounced to verify the accuracy of the Daily Burn Request, Burn Plan, or Accomplishment data ~~described pursuant to R18-2-1505~~ as well as matching burn approval with actual conditions, and smoke dispersion, and air quality impacts. On-ground site inspection procedures and aerial surveillance shall be coordinated by ADEQ and the F/SLM for safety purposes.

B. ADEQ may use remote automated weather station data if necessary to verify current and previous meteorological conditions at or near the burn site.

C. ADEQ may audit burn accomplishment data, smoke dispersion measurements, or weather measurements from previously conducted burns, if necessary to verify conformity with, or deviation from, procedures and authorizations approved by ADEQ.

Notices of Final Rulemaking

D. Deviation from procedures and authorizations approved by ADEQ constitute a violation of this Article. Violations may require containment or mop-up of any active burns and may also require, in the Director's discretion, a ~~5~~ five-day moratorium on ignitions by the responsible F/SLM. Violations of this Article are also subject to a civil penalty of not more than \$10,000 per day per violation ~~pursuant to~~ under A.R.S. § 49-463.

R18-2-1515. Forms; Electronic Copies; Information Transfers

- A.** ADEQ shall make available on paper and in electronically-readable format any form required to be developed by ADEQ and completed by a F/SLM.
- B.** After consultation with ~~the~~ an F/SLM, ADEQ may require ~~each~~ the F/SLM to provide data in a manner that ~~allows for and~~ facilitates electronic transfers of information.