

# OPEN BURNING POLICY & GUIDELINES

18 AAC 50 as amended through September 26, 2015

State of Alaska  
Department of Environmental Conservation  
Division of Air Quality  
Air Permits Program



*“A successful burn is one in which no complaints are received by the Department.”*

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## POLICY AND GUIDELINES

The State of Alaska has two basic concerns with open burning: 1) that it does not spread and become a wildfire, and 2) that it does not cause air pollution that creates a health hazard or a public nuisance. The Department of Natural Resources (DNR) is responsible for regulations and permits to address the first concern (fire safety). The Department of Environmental Conservation (DEC) is responsible for regulations and permits to address the second concern (environmental protection).

It is the policy of the DEC to eliminate, minimize, or control open burning and to encourage other methods of disposal where possible. When open burning is permitted by the DEC, the permittee must provide for the most efficient combustion possible for the material to be burned. The DEC supports the maximum recycling and utilization of wood and forest products to reduce the volume of material requiring burning.

All open burning in the state, whether requiring written approval from DEC or not, must be done in a way that maintains maximum combustion efficiency throughout the burning period.

The Enhanced Smoke Management Plan (ESMP) establishes the procedures for resource management and land clearing burns in the state and is a part of the state's Regional Haze State Implementation Plan.

### **18 AAC 50.110. AIR POLLUTION PROHIBITED.**

A person may not cause or permit any emission that is injurious to human health or welfare, animal or plant life, or property, or that would unreasonably interfere with the enjoyment of life or property.

### **18 AAC 50.065. OPEN BURNING.**

(a) Except when conducting open burning under (g), (h), or (i) of this section, a person conducting open burning shall comply with the limitations of (b) - (f) of this section and shall ensure that

- (1) the material is dried or kept covered to the greatest extent possible prior to burning;
- (2) before igniting the burn, noncombustibles are separated;
- (3) natural or artificially induced draft is present;
- (4) to the greatest extent practicable, combustibles are separated from grass or peat layer;
- (5) combustibles are not allowed to smolder (burn and smoke without flame).

(b) **Black Smoke Prohibited.** Except for firefighter training conducted under (h) or (i) of this section, open burning of asphalt products, rubber products, plastics, tars, oils, oily wastes, contaminated oil cleanup materials, or other materials in a way that gives off black smoke is prohibited without written department approval. Department approval of open burning as an oil spill response countermeasure is subject to the DEC's *In Situ Burning Guidelines for Alaska*, adopted by reference in 18 AAC 50.035. Open burning approved under this section is subject to the following limitations:

(1) opening burning of liquid hydrocarbons produced during oil or gas well flow tests may occur only when there are no practical means available to recycle, reuse, or dispose of the fluids in a more environmentally acceptable manner;

(2) the person who conducts open burning shall establish reasonable procedures to minimize adverse environmental effects and limit the amount of smoke generated; and

(3) the department will, in its discretion, as a condition of approval issued under this subsection, require public notice as described in (j) of this section.

(c) **Toxic and Acid Gases and Particulate Matter Prohibited.** Open burning or incineration of pesticides, halogenated organic compounds, cyanic compounds, or polyurethane products in a way that gives off toxic or acidic gases or particulate matter is prohibited.

(d) **Adverse Effects Prohibited.** Open burning of putrescible garbage, animal carcasses, or petroleum-based materials, including materials contaminated with petroleum or petroleum derivatives, is prohibited if it causes odor or black smoke that has an adverse effect on nearby persons or property.

(e) **Air Quality Advisory.** Open burning is prohibited in an area if the DEC declares an air quality advisory under 18 AAC 50.245, stating that burning is not permitted in that area for that day. This advisory will be based on a determination that there is or is likely to be inadequate air ventilation to maintain the standards set by 18 AAC 50.010. The DEC will make reasonable efforts to ensure that the advisory is broadcast on local radio or television.

(f) **Wood Smoke Control Areas.** Open burning is prohibited between November 1 and March 31 in a wood smoke control area identified in 18 AAC 50.025(b).

(g) **Controlled Burning.** Controlled burning to manage forest land, vegetative cover, fisheries, or wildlife habitat, other than burning to combat a natural wildfire, requires written DEC approval if the area to be burned exceeds 40 acres yearly. The DEC will, in its discretion, require public notice as described in (j) of this section.

(h) **Firefighter Training: Structures.** A fire service may open burn structures for firefighter training without ensuring maximum combustion efficiency under the following circumstances:

(1) before igniting the structure, the fire service shall

(A) obtain DEC approval for the location of the proposed firefighter training; approval will be based on whether the proposed open burning is likely to adversely affect public health in the neighborhood of the structure;

(B) visually identify materials in the structure that might contain asbestos, test those materials for asbestos, and remove all materials that contain asbestos;

(C) ensure that the structure does not contain

(i) putrescible garbage;

(ii) electrical batteries;

(iii) stored chemicals such as fertilizers, pesticides, paints, glues, sealers, tars, solvents, household cleaners, or photographic reagents;

(iv) stored linoleum, plastics, rubber, tires, or insulated wire;

- (v) hazardous waste;
- (vi) lead piping;
- (vii) plastic piping with an outside diameter of four inches or more; or
- (viii) urethane or another plastic foam insulation;

(D) provide public notice consistent with (j) of this section; and

(E) ensure that a fire-service representative is on-site before igniting the structure;

(2) the fire service shall ignite and conduct training on only one main structure and any number of associated smaller structures at a time; examples of associated smaller structures are garages, sheds, and other outbuildings; and

(3) the fire service shall respond to complaints in accordance with (k) of this section.

(i) **Firefighter Training: Fuel Burning.** Unless a greater quantity is approved by the DEC, a fire service may open burn up to 250 gallons of uncontaminated fuel daily and up to 600 gallons yearly for firefighter training without ensuring maximum combustion efficiency. To conduct this training without prior written DEC approval, the fire service shall

(1) provide public notice consistent with (j) of this section before burning more than 20 gallons of uncontaminated fuel, unless waived in writing by the DEC; and

(2) respond to complaints in accordance with (k) of this section.

(j) **Public Notice.** A person required to provide public notice of open burning shall issue the notice through local news media or by other appropriate means if the area of the open burning does not have local news media. The public notice must be issued as directed by the DEC and must

(1) state the name of the person conducting the burn;

(2) provide a list of material to be burned;

(3) provide a telephone number to contact the person conducting the burn before and during the burn;

(4) for a surprise fire drill, state

(A) the address or location of the training; and

(B) the beginning and ending dates of the period during which a surprise fire drill may be conducted may not exceed 30 days; and

(5) for open burning other than a surprise fire drill, the notice must also state the expected time, date, and location of the open burning.

(k) **Complaints.** A person required to provide public notice of open burning shall:

(1) make a reasonable effort to respond to complaints received about the burn;

(2) keep a record for at least 30 days of all complaints received about the burn, including:

(A) the name, address, and telephone number of each person who complained;

(B) a short summary of each complaint; and

(C) any action the person conducting the open burning took to respond to each complaint; and

(3) upon request, provide the DEC with a copy of the records kept under (2) of this subsection. (Eff. 1/18/97, Register 141)

**Authority:** AS 46.03.020, AS 46.03.710, AS 46.14.010, AS 46.14.020, AS 46.14.030, Sec. 30, ch. 74, SLA 1993

#### **AS 46.14.990 DEFINITION.**

(2) "ambient air" has the meaning given in 40 CFR 50.1, which means that portion of the atmosphere, external to buildings, to which the general public has access.

#### **18 AAC 50.990 DEFINITIONS.**

(14) "black smoke" means smoke having the color of emissions produced by the incomplete combustion of toluene in the double wall combustion chamber of a smoke generator.

(40) "fire service" means a fire Department registered with the state fire Marshall under 13 AAC 52.030, an organized fire brigade established under 8 AAC 61.010, Subchapter 01.1302(a)(1), and a wildland fire suppression organization within the Alaska Department of Natural Resources, Division of Forestry, the United States Forest Service, or the United States Bureau of Land Management/Alaska Fire Service.

(47) "impairment of visibility" means a humanly perceptible change in visibility such as visual range, contrast, or coloration, from that which would exist under natural conditions.

(62) "open burning" means the burning of a material that results in the products of combustion being emitted directly into the ambient air without passing through a contaminant outlet.

(64) "organic vapors" means any organic compound or mixture of compounds evaporated from volatile liquid or any organic compound or mixture of compounds in aerosols formed from volatile liquid.

(74) "practical means available" means, when approving the open burning of liquid hydrocarbons produced during oil or gas well testing, that all alternative disposal methods will have been analyzed and, where an environmentally acceptable procedure exists, it will be required.

(75) "putrescible garbage" means material capable of being decomposed with sufficient rapidity to cause nuisance or obnoxious odors.

(78) "reduction in visibility" means the obscuring of an observer's vision.

(81) "responsible official" means:

(A) for a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of the principal business function, or any other person who performs similar policy or decision making functions for the corporation, or a duly authorized representative of that person if the representative is responsible for the overall operation of one or more manufacturing, production, or operation facilities applying for or subject to a permit under AS 46.14 or this chapter, and

(i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$35 million in second quarter 1980 dollars; or

(ii) the delegation of authority to the representative is approved in advance by DEC;

(B) for a partnership or sole proprietorship, a general partner or the proprietor, respectively; and

(C) for a public agency, a principal executive officer or ranking elected official; for the purposes of this chapter, a principal executive officer of a federal agency includes the chief executive officer with responsibility for the overall operations of a principal geographic unit in this state.

(85) "smolder" means to burn and smoke without flame.

(96) "uncontaminated fuel" means a hydrocarbon fuel, excluding propane, that does not contain used oil, crude oil, or a hazardous waste.

#### **18 AAC 50.245. AIR EPISODES AND ADVISORIES.**

**18 AAC 50.245. Air quality episodes and advisories for air pollutants other than PM-2.5.** (a) The department or a local air quality control program may declare an air quality episode and prescribe and publicize curtailment action if the concentration of an air pollutant in the ambient air has reached, or is likely in the immediate future to reach, any of the concentrations established in Table 6 in this subsection.

**Table 6.**  
**Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5**

<b>Episode Type</b>	<b>Air Pollutant</b>	<b>Concentration in micrograms per cubic meter {and in ppm where applicable}</b>
Air Alert	Sulfur dioxide	365 (24-hour average) {0.14 ppm}
	* PM <sub>2.5</sub>	40 (24-hr average)
	PM <sub>10</sub>	150 (24-hour average)
	PM <sub>10</sub> from wood burning (wood smoke control areas)	92 (24-hour average)
	Carbon monoxide	10,000 (8-hour average) {8.7 ppm}
Air Warning	Sulfur dioxide	800 (24-hour average)

		{0.31 ppm}
	* PM <sub>2.5</sub>	150 (24-hr average)
	PM <sub>10</sub>	350 (24-hour average)
	Carbon monoxide	17,000 (8-hour average) { 15 ppm }
Air Emergency	Sulfur dioxide	1,600 (24-hour average) {0.61 ppm}
	* PM <sub>2.5</sub>	250 (24-hr average)
	PM <sub>10</sub>	420 (24-hour average)
	PM <sub>10</sub> from wood burning (wood smoke control areas)	During an air alert, a concentration measured or predicted to exceed 92 (24-hour average), and to continue to increase beyond the concentration that triggered the air alert
	Carbon monoxide	34,000 (8-hour average) { 30 ppm }

(b) The department or a local air quality control program will declare an air quality advisory if, in its judgment, air quality or atmospheric dispersion conditions exist that might threaten public health.

(c) If the department or a local air quality control program declares an air quality advisory under (b) of this section, the department or a local air quality control program will

- (1) request voluntary emission curtailments from any person issued a permit under this chapter whose stationary source’s emissions might impact the area subject to the advisory; and
- (2) publicize actions to be taken to protect public health.

(d) Nothing in this section alters a local government’s powers or obligations under a local air quality control program established under AS 46.14.400 and other local laws, as applicable. (Eff. 1/18/97, Register 141; am 10/1/2004, Register 171; am 2/28/2015, Register 213)

**18 AAC 50.246. Air quality episodes and advisories for PM-2.5.** (a) The department or a local air quality control program may declare an air quality episode and prescribe and publicize the actions to be taken if the concentrations of PM-2.5 in the ambient air has reached, or is likely in the immediate future to reach, any of the concentrations established in Table 6a in this subsection. The episode thresholds and actions prescribed for any area that has a local air quality plan included in the *State Air Quality Control Plan* adopted by reference in 18 AAC 50.030 must be consistent with the emergency episode provisions included in that plan.

**Table 6a  
Concentrations Triggering an Air Quality Episode for PM-2.5**

<b>Episode Type</b>	<b>Air Pollutant</b>	<b>Concentration in micrograms per cubic meter</b>
Air Alert	PM <sub>2.5</sub>	35.5 (24-hour average)
Air Warning	PM <sub>2.5</sub>	55.5 (24-hour average)
Air Emergency	PM <sub>2.5</sub>	150.5 (24-hour average)

(b) The department or a local air quality control program authorized by the department under AS 46.14.400 will declare a PM-2.5 air quality advisory if, in its judgment, PM-2.5 air quality or atmospheric dispersion conditions exist that might threaten public health.

(c) If the department or a local air quality control program declares a PM-2.5 air quality advisory under (b) of this section, the department or a local air quality control program will

- (1) request voluntary emission curtailments from any person issued a permit under this chapter whose stationary source's emissions might impact the area subject to the advisory; and
- (2) publicize actions to be taken to protect public health.

(d) Nothing in this section alters a local government's powers or obligations under a local air quality control program established under AS 46.14.400 and other local laws, as applicable. (Eff. 2/28/2015, Register 213)

**Authority:** AS 46.03.020                      AS 46.14.020                      Sec. 30, ch. 74, SLA 1993  
AS 46.14.010                      AS 46.14.030

#### **ARTICLE 4. USER FEES.**

##### **18 AAC 50.400. PERMIT ADMINISTRATION FEES.**

(g) The fee for department review of and routine compliance services for a request for open burning under 18 AAC 50.065 is \$230. If the department determines that smoke incursion into a public place, into an airport, into a Class I area, into any nonattainment area, or into any maintenance area is likely, all additional costs will be charged in accordance with (h) of this section.

(h) Unless the designated regulatory service is subject to a fixed fee set out in (a) – (g) of this section, or to the terms of a negotiated service agreement under AS 37.10.052(b) and 18 AAC 50.403, the permittee, owner, or operator shall pay an hourly permit administration fee for a designated regulatory service. The department will calculate the total amount due under this subsection by multiplying the number of hours spent to provide the designated regulatory service by the hourly rate of salary and benefits of the department employees who provided the designated regulatory service, and by adding to the resulting amount any other direct costs.

**Authority:** AS 37.10.050, AS 37.10.052, AS 37.10.058, AS 44.46.025, AS 46.03.020, AS 46.14.140, AS 46.14.240

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## **AREA-WIDE POLLUTANT CONTROL EFFORTS FOR OPEN BURNING**

Control of open burning incidences for air pollution is the responsibility of the DEC. Open burning is defined as, "the burning of a material that results in the products of combustion being emitted directly into the ambient air without passing through a contaminant outlet." All open burning in the state, whether requiring written approval from the DEC or not, must be done in a way that maintains maximum

combustion efficiency throughout the burning period.

Open burning at landfills is also controlled by solid waste disposal regulations, 18 AAC 60.355. Open burning is prohibited at Class I and II landfills.

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### **MATERIALS THAT CANNOT BE OPEN BURNED:**

- Spill absorbents and contaminated soils that are RCRA hazardous waste.
- Pesticides, halogenated organic compounds, cyanic compounds or polyurethane products burned in a way that gives off toxic or acidic gases or particulates.
- Putrescible garbage, animal carcasses, or petroleum-based materials burned in a way that causes odor or black smoke that may have an adverse effect on nearby persons or residences.
- Electrical batteries, all types and sizes.
- All liquid-form paints (e.g. in cans).
- Lead-based painted wood debris, if classified as RCRA hazardous waste. For more guidance concerning wood with lead-based paint, please contact EPA RCRA office, Diane Richardson, at 907-271-6329.
- All solvents, except those composed of water and soap/detergent solutions.
- All aerosol cans, except that those do not use chloro- or fluoro- carbon propellants.
- Asbestos or any metals or alloys containing beryllium, chromium, cobalt, arsenic, selenium, cadmium, mercury, lead, or any radioactive wastes.
- Any electrical or electronic lamps or components that contain any of the above metals/alloys (including fluorescent, high-pressure sodium, mercury vapor and metal halide lamps).
- Any plastics or other materials containing chlorine as an essential component (such as Polyvinyl Chloride - PVC pipe). However, empty containers containing salt residue may be burned (salt is any metal chloride used for thawing or ion exchange).
- Tires.
- Treated wood containing compounds such as creosote, naphthalene, or tar.

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### **WHO NEEDS WRITTEN APPROVAL?**

Certain types of open burning require written approval from the DEC prior to the incident. These include:

#### **1. Controlled Burning For Land Clearing:**

Open burning of woody debris material by farmers and developers requires written DEC approval if the intent is to clear and burn 40 acres or more per year. DEC will, in its discretion, require public notice. Open burning should be done, as rapidly and safely as other considerations permit, to develop maximum heat energy per unit time and vent the smoke to the highest elevation possible. The burn material should be as dry as possible to create a high heat energy, less smoke, and a more efficient burn. Additional requirements for land clearing burns are outlined in the ESMP.

#### **2. Controlled Burning For Resource Management (Prescribed Burning):**

Prescribed burning, intentionally set fires to burn off ground and forest cover is usually, but not always, done by land management agencies. Prescribed burning is subject to obtaining written DEC approval if the intent is to clear 40 acres or more in a year. DEC will, in its discretion, require public notice. Additional requirements for resource prescribed burns are outlined in the ESMP.

### **3. Fire Fighter Training:**

Fire fighter training using structures or fuels must be conducted pursuant to 18 AAC 50.065(b), (h), and (i) and requires written DEC approval. Public notification is required unless DEC issues a written waiver for burns conducted in remote areas, where the news media is not generally available, or where no public will be affected.

A fire service may ignite and conduct training on only one main structure and its associated smaller structures at a time; examples of associated smaller structures are garages, sheds, and other outbuildings within close proximity to the main structure. Structures must be inspected for hazardous wastes and other nonburnables prior to ignition. Materials listed on the “**MATERIALS THAT CANNOT BE OPEN BURNED**” list (page 9 of this Guidance) are to be removed from the structure prior to ignition.

A fire service may open burn up to 250 gallons of uncontaminated fuel daily and up to 600 gallons yearly for fire fighter training without prior DEC approval, provided that the fire service give public notice of the event before burning more than 20 gallons of fuel and responds to complaints in accord with 18 AAC 50.365(j) and (k) respectively.

Fire fighter training shall be conducted pursuant to 18 AAC 50.065(b) and (h) and is subject to written DEC approval. Public notification is required according to 18 AAC 50.065(j).

### **4. Burning Materials that Produce Black Smoke:**

Open burning of petroleum-based materials, asphalt, rubber products, or other materials in a way that give off black smoke is subject to obtaining written DEC approval. In addition, DEC will, in its discretion, require public notice.

Open burning should be done using reasonable procedures to minimize adverse environmental effects and limit the amount of smoke generated.

Open burning of oil or gas well flow tests must conform to 18 AAC 50.065(b)(1) and the guidance contained in the *In situ Burning Guidelines for Alaska*. DEC intends to eliminate open burning of liquid hydrocarbons because alternative measures are generally available. If alternatives become unusable because of equipment breakdown or inclement weather, such events do not constitute the non-availability of alternatives.

### **OPEN BURNING PROHIBITION:**

Open burning can be prohibited on an area-by-area basis if DEC issues an air quality advisory covering the area of concern. This advisory can be for a maximum of twenty-four hours but may be renewed daily. The advisory will be based on an assessment that inadequate air ventilation is available which would inhibit the dispersal of pollutants, such as inversions and low wind speeds.

## **BURN PLAN APPROVAL GUIDELINES**

### **APPROVAL ISSUANCE:**

Volume II, Section III-F of the Alaska Air Quality Control Plan incorporated by reference under 18 AAC 50.030 lists the requirements for obtaining approval to open burn. DEC has up to 30 days to issue an approval. Written approval is not automatic but must be evaluated for conformance with the following guidelines.

A contingency plan should be prepared in case of unforeseen changes in weather or other uncontrollable parameters that would affect your burn and the resultant smoke. Persons with approval must curtail their fire if air in the area is becoming overloaded or local weather factors would create smoke problems, even though no other restrictions have been imposed ( i.e. wind moving directly into sensitive areas, inversions, etc.).

If any safety hazard is present, you must extinguish the fire as soon as possible. You will be held legally responsible for any accident or adverse health effects that occur because of your open burn.

The guidelines of a burn plan should include the following:

#### **1.1.**

#### **2. Indicate the location, duration, and inclusive dates considered for the burn**

Provide a legal description or latitude and longitude of the location to be burned and the expected duration of both single events and the entire burning project. Minor changes or additional information for the burn plan can be discussed at the time DEC is notified by phone. At a minimum, the applicant is required to call DEC by noon at least one working day prior to ignition. Call the number listed in the Open Burn Approval Letter.

#### **3. Identify the location of all sensitive features that might be impacted by smoke**

The Responsible Authority should identify on a map all sensitive features, which include population centers such as communities, cities, towns, hospitals, health clinics, nursing homes, schools (in session), campgrounds, numbered Alaska highways and roads, airports, Prevention of Significant Deterioration Class I Areas, and any other areas where smoke and air pollutants can adversely affect public health, safety, and welfare.

#### **4. Indicate how the public will be informed prior to, during, and after the burning**

The best way to avoid complaints is to make sure everyone around the burn area knows when the burn will occur so they can take steps to avoid the smoke. The Responsible Authority's local contact phone number should be publicized so the public can contact you. The public must be notified at least three days prior to the anticipated burn through the local news media or the local Post Office.

#### **5. Indicate how coordination with other concerned agencies, including the Responsible Authorities of sensitive features, will be carried out**

Indicate how all concerned agencies will be notified prior to ignition, including authorities in control of sensitive features identified in item 2 (such as the FAA, State Troopers, military, fire department, adjacent land managers, etc.) who are potentially affected by impaired visibility or adverse smoke impacts. Include a list of telephone numbers or email addresses of agencies that must be contacted prior to ignition.

The Department of Natural Resources, Division of Forestry (DOF) also issues burn permits; contact DOF to determine what requirements apply. The DOF burn permits are in addition to DEC burn approvals and address fire safety and other issues.

**6. Indicate the source of the weather forecast and how it will be used to prevent smoke impacts**

Identify how the local and spot weather forecast will be obtained (e.g., through the NWS) prior to ignition of the controlled burn. Parameters that should be obtained are the predicted visibility, dispersion conditions, wind direction, and wind speed.

**7. Indicate how weather changes will be monitored and what will be done to reduce or mitigate smoke impacts if unfavorable weather should occur after ignition**

Indicate how the weather will be monitored throughout the controlled burn. Identify what actions will be taken if a wind shift or other weather change begins to create an adverse smoke impact on sensitive features identified in Item 2. For example, if an inversion is expected to occur during the night, active ignitions could be ceased.

If any safety hazard is present as a result of smoke, or if requested by the authority of a sensitive feature, all technologically feasible and economically and environmentally reasonable steps to mitigate smoke impacts must be taken.

**8. Indicate what will be done to validate predicted smoke dispersion**

Indicate how smoke dispersion will be predicted. If a recommended method (test fire, small piles or areas, etc.) fails to indicate that acceptable smoke dispersion will occur, no fires will be ignited.

**9. Indicate proposed techniques to be used to enhance the active fire phase and reduce the smoldering phase**

Consider employing emission reduction techniques (Appendix D) to enhance the active fire phase and reduce smoldering, and indicate what is feasible to accomplish the burn objectives.

**10. Indicate how authorities in control of sensitive features will be contacted if visibility decreases**

Provide a contingency plan (Appendix E) for smoke intrusion into populated areas, Class I areas, or other smoke sensitive features as notified in item 2. Authorities having control over sensitive features identified in item 2 must be notified if visibility is expected to be decreased to less than three miles for an hour. Indicate how authorities of sensitive features will be notified if

this occurs. If any safety hazard is present, or if requested by the authority of a sensitive feature, impacts must be mitigated through steps that are technologically feasible and economically and environmentally reasonable. Contingency or emergency monitoring may be needed to measure and detect smoke intrusions on sensitive features.

#### **11. Identify alternative disposal options for material being controlled burned**

An evaluation of alternatives to controlled burning (Appendix F) must demonstrate that controlled burning is the only technologically feasible and economically and environmentally reasonable alternative. Identify other alternative disposal options for material burned (e.g., marketing timber with a lumber company) or why burning is the selected alternative and why the alternatives were not used; or list any alternatives to burning that have been done to the burn units prior to ignition.

#### **12. Indicate how coordination with air quality authorities having jurisdiction will take place**

At a minimum, notify DEC by telephone by noon one business day prior to ignition. Call the number listed in the Open Burn Approval Letter. Include the 11 items in Section 2.2. If a multiple day burn is planned, the responsible authority need only call before the first ignition day. A call to DEC after a multiple day burn is completed is requested. If the burn is not conducted, please notify DEC within 24 hours to schedule a new burn date.

#### **13. Indicate the type of vegetation to be burned, pre-burn and post-burn fuel loading estimates, and ignition technique to be used**

Pre-burn fuel loading represents the amount of fuel present at the burn location (to be consumed) and should be expressed as the weight of fuel per unit area in tons per acre. The post-burn loading estimate represents the fuel remaining after the burn. The ignition technique should describe the method (e.g., hand ignition, drip torch, helitorch) and technique (e.g., strip head fire, backing fire, etc.)

#### **14. For prescribed fires, indicate whether the fire is considered “anthropogenic” or “natural.” Note: Land clearing burns will be considered “anthropogenic.”**

The WRAP document, “Policy for Categorizing Fire Emissions” explains what is considered a natural source of fire and what is considered a human-caused source.

#### **15. Provide the approximate emissions expected for each burn and method used to estimate. Note: Emission estimates for Land Clearing Burns will be calculated by DEC.A**

Emissions can be estimated by multiplying the amount of fuel consumed (usually expressed in tons), by an emission factor expressed in pounds per ton of fuel. Emission factors can be found on EPA’s website at <http://www.epa.gov/ttn/chief/ap42/ch13/>. Other emission factors or methods may also be used, including, but not limited to: CONSUME, FEPS, FOFEM, PFEP, and SASEM (Appendix D).

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A <http://www.wrapair.org/forums/fejf/docs.html>

**16. Air monitoring to be conducted**

Identify how the burn may affect or potentially impact air quality at smoke sensitive features, and how the visibility in Class I areas will be monitored (Appendix G). If the burn will not adversely affect visibility in a Class I area, state that there is low potential of the burn impacting visibility in a Class I area and that monitoring will not be conducted.

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**HOW TO OBTAIN OPEN BURNING APPROVAL:**

The applicant shall submit an application for the proposed open burning, which addresses each of the eleven concerns specified above. Application forms are available from DEC, or at <http://www.state.ak.us/dec/air/ap/applic.htm>.

Please note that there are fees for open burning approvals. With each open burn application, the applicant shall submit a \$200 retainer payable to the State of Alaska, DEC. The cost of the approval will be \$200 unless DEC determines that there may be smoke incursion into a public place, into an airport, into a Class I area, into a non-attainment area for CO or PM-10, or into a maintenance area for CO or PM-10. If DEC determines there may be smoke incursion, then DEC will notify the applicant that DEC will charge an hourly administrative fee and direct costs for approval processing and administration. DEC will prepare and send a monthly invoice itemizing fees and direct costs to the applicant.

Open burning in compliance with these guidelines or with the approval conditions does not exempt any person from any civil or criminal liability for consequences or damages resulting from such burning, nor does it exempt any person from complying with any other applicable law, ordinance, regulation, rule, permit, order, or decrees of this or any other governmental entity having jurisdiction.