

**Appendix O: Fugitive Dust
and Open Burning**

Existing Requirements

Hawaii Administrative Rule Chapter 11-60.1

Subchapter 2 Prohibitions

§11-60.1-33 Fugitive dust.

- (a) No person shall cause or permit visible fugitive dust to become airborne without taking reasonable precautions. Examples of reasonable precautions are:
- (1) Use of water or suitable chemicals for control of fugitive dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - (2) Application of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which may result in fugitive dust;
 - (3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Reasonable containment methods shall be employed during sandblasting or other similar operations;
 - (4) Covering all moving, open-bodied trucks transporting materials which may result in fugitive dust;
 - (5) Conducting agricultural operations, such as tilling of land and the application of fertilizers, in such manner as to reasonably minimize fugitive dust;
 - (6) Maintenance of roadways in a clean manner; and
 - (7) Prompt removal of earth or other materials from paved streets which have been transported there by trucking, earth-moving equipment, erosion, or other means.
- (b) Except for persons engaged in agricultural operations or persons who can demonstrate to the director that the best practical operation or treatment is being implemented, no person shall cause or permit the discharge of visible fugitive dust beyond the property lot line on which the fugitive dust originates.

Subchapter 3 Open Burning

§11-60.1-51 Definitions. As used in this subchapter:

"Agricultural burning" means the use of open burning in agricultural operations, forest management, or range improvements.

"Agricultural operation" means a bona fide agricultural, silvicultural, or aquacultural activity for the purpose of making a profit by raising, harvesting and selling crops, or by raising and selling livestock or poultry, or produce thereof. Agricultural operation also means activities conducted by non-profit agricultural research organizations and by educational institutions for the purpose of providing agricultural instruction. The burning of animal carcasses is not an agricultural operation.

"Attended" means to be present [at](#) to look after, or to take charge of.

"Aquacultural" means dealing with the cultivation of the natural produce of water.

"Clearing of land" means the removal of nonagricultural waste or vegetation from land not currently being utilized for agricultural operations, or not associated with forest management or range improvement.

"District" means a geographic area, as designated by the director, to distinguish appropriate air basins for the purpose of smoke management.

"Forest management" means wildland vegetation management using prescribed burning procedures which have been approved by the forestry division or responsible federal agency prior to the commencement of any burn and which are being conducted by a public agency or through a cooperative agreement involving a public agency. The fire department may be consulted for advice and guidance as part of the prescribed burning procedure.

"Forestry division" means the division of forestry and wildlife of the department of land and natural resources of the State of Hawaii.

"No-burn period" means any period in which agricultural burning or conditionally allowed open burning in subsection 11-60.1-52(e) is prohibited by the director as provided in section 11-60.1-55.

"Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate stack or flare.

"Range improvement" means physical modification or treatment which is designed to: improve production of forages; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect, and improve the conditions of the rangeland ecosystems to benefit livestock, horses, and fish and wildlife.

"Silvicultural" means dealing with the cultivation of forest trees; forestry.

§11-60.1-52 General provisions.

- (a) Except as provided in subsections (b), (c), (d), (e) and section 11-60.1-53, no person shall cause, permit, or maintain any open burning. Any open burning is the responsibility of the person owning, operating, or managing the property, premises, business establishment, or industry where the open burning is occurring. Subsections (b), (c), (d), (e) and section 11-60.1-53 shall not apply to the open burning of human remains or animal carcasses unless the activities fall under the exemptions found in paragraph (d)(2).
- (b) Subsection (a) shall not apply to attended fires for the cooking of food.
- (c) Subsection (a) shall not apply to the following, provided that notification is given to the director prior to the commencement of any burn:
 - (1) Fires set to a building, structure or simulated aircraft for training personnel in firefighting methods.
- (d) Subsection (a) shall not apply to the following, provided that the burning is approved by the director:
 - (1) Fires for recreational, decorative, or ceremonial purposes;
 - (2) Fires for the disposal of human remains and animal carcasses and debris generated from a natural disaster or catastrophic event, where there is no reasonable alternative method of disposal; and
 - (3) Other fires as approved by the director.

- (e) Subsection (a) shall not apply to the following, provided that the burning is both approved by the director, and that the burning is allowed under either section 11-60.1-55 or 11-60.1-52(f):
 - (1) Fires to abate a fire hazard, provided that the hazard is so declared by the fire department, forestry division, or federal agency having jurisdiction, and that a prescribed burning plan, if applicable, has been submitted to and approved by the jurisdictional agency;
 - (2) Fires for prevention or control of disease or pests; and
 - (3) Fires for the disposal of dangerous materials, where there is no alternate method of disposal;
- (f) The director may provide a waiver to the section 11-60.1-55 "no-burn" period for any exemption to open burning found under subsection 11-60.1-52(e).
- (g) Subsections (b), (c), (d), or (e) shall not exempt any activity from the application of any rules or requirements in any other section or chapter.

§11-60.1-53 Agricultural burning: permit applicability.

No person engaged in any agricultural operation, forest management, or range improvement shall cause or allow agricultural burning without first obtaining an agricultural burning permit from the director. Any person who fails to comply with the terms and conditions of the permit or this chapter shall be subject to the penalties and remedies provided for in sections 342B-42, 342B-44, 342B-47, and 342B-48, HRS, including the invalidation of the permit. No agricultural permit shall be granted for, or be construed to permit:

- (1) The open burning of trash, waste, or byproducts generated outside the permitted property;
- (2) The open burning of trash or other waste that has been handled or processed by factory operations, not including material from the field; or
- (3) The open burning of any waste for the clearing of land.

§11-60.1-54 Agricultural burning permit application.

- (a) Application for an agricultural burning permit shall be made on forms furnished by the director. The application shall include the following:
 - (1) Business license information or commercial agricultural activity general excise tax license, if applicable;
 - (2) Maps of areas to be burned showing fields by appropriate numbers and acreage, direction of prevailing winds, location of residential, school, and commercial establishments, public buildings, airports, and public utilities;
 - (3) The designation of fields to be burned under specified wind conditions; and
 - (4) Any other information as required and deemed necessary by the director to make a decision on the application.

- (b) To be eligible for an agricultural burning permit, the applicant must currently be involved in agricultural operations, forest management, or range improvements at the property where burning will occur, and must have legal right, title, or possession to the property, and if not the owner, must have the written authorization of the owner or owner's representative to burn on the property.
- (c) Each application shall be signed by the applicant as being true and accurate and shall constitute an agreement that the applicant shall comply with all the terms and conditions of the permit and this chapter.
- (d) The director shall not continue to act upon or consider any incomplete application. An application shall be determined to be complete only when all of the following have been complied with:
 - (1) All information required or requested pursuant to subsection (a) has been submitted;
 - (2) All documents in subsection (a) have been signed by the applicant; and
 - (3) All applicable fees have been submitted.
- (e) The application will be deemed complete sixty days after received unless the director requests the applicant to provide additional information.

§11-60.1-55 Agricultural burning or conditionally allowed open burning from subsection 11-60.1-52(e): "no-burn" periods.

- (a) Except as provided in subsection (d), no person, with or without an agricultural burning permit, shall cause or allow agricultural burning or conditionally allowed open burning from subsection 11-60.1-52(e) under the following conditions:
 - (1) When the director determines that meteorological conditions have resulted in widespread haze on any island or in any district on the island and that these meteorological conditions will continue or deteriorate. For the purposes of this section, widespread haze shall be considered to exist when all visible ridges:
 - (A) Within five to ten miles have a "smoky" or bluish appearance and colors are subdued; and
 - (B) Beyond ten miles have a blurred appearance;
 - (2) When a "no-burn" period has been declared in a district and smoke from any adjacent district, as determined by the director, may impact on the affected district, the "no-burn" period shall apply to both districts.
- (b) Notices of "no-burn" periods for the specified islands or districts may be provided by radio broadcast and shall apply for a specified "no burn" period.
- (c) Verification that widespread haze exists in any district may be accomplished by consultation with personnel in the appropriate district fire or police stations.
- (d) In a district where a long-term "no burn" declaration is in effect, the director may provide a waiver during an agricultural "no burn" period for the control of plant diseases or infestations when burning is determined to be the sole method of control.

§11-60.1-56 Agricultural burning: recordkeeping and monitoring. Each permittee shall monitor and maintain records in accordance with the agricultural burning permit issued by the director.

§11-60.1-57 Agricultural burning: action on application.

- (a) The director shall act on a complete application within a reasonable time, but not to exceed ninety calendar days from the date the complete application is received, and shall notify the applicant in writing of the approval or denial of the application. If the director has not acted on an application within the ninety calendar-day period, the application shall be deemed to have been approved.
- (b) If an application is denied, the applicant may request in writing, a re-evaluation of the application to the director.
- (c) If the application is denied after the reevaluation, the applicant may request a hearing in accordance with chapter 91, HRS.
- (d) The permit may be granted for a period of up to one year from the date of issuance.
- (e) At the director's sole discretion or the application of any person, the director may terminate, suspend, reopen, or amend a permit if, after affording the applicant a hearing in accordance with chapter 91, HRS, it is determined that:
 - (1) Any condition of the permit has been violated;
 - (2) Any provision of this chapter has been violated;
 - (3) Any provision of chapter 342B, HRS, has been violated;
 - (4) The maintenance or attainment of NAAQS and state ambient air quality standards will be interfered with; or
 - (5) The action is in the public interest. (f) The permit shall not be transferable whether by operation of law or otherwise or from one person to another.
- (f) The permit shall not be transferable whether by operation of law or otherwise or from one person to another.

§11-60.1-58 Agricultural burning: permit content. The director shall consider and incorporate the following elements into an agricultural burning permit, as applicable:

- (1) Notification of appropriate authorities prior to each burn;
- (2) The type and amount of material allowed to be burned and the time period(s) when burning is allowed;
- (3) Proper fire and safety control measures;
- (4) Operator or permittee must allow the director or an authorized representative, upon presentation of credentials, to enter the burn location and inspect, all facilities, practices, and operations, or records covered under the terms and conditions of the permit; and
- (5) Any other provision to assure compliance with all applicable requirements of HAR Chapter 11-60.1.

Propose Revisions
(Markups in Red Fonts and Pending
Approval)
Hawaii Administrative Rule Chapter 11-60.1

Subchapter 2 Prohibitions

§11-60.1-33 Fugitive dust.

- (a) No person shall cause or permit visible fugitive dust to become airborne without taking reasonable precautions. Examples of reasonable precautions are:
- (1) Use of water or suitable chemicals for control of fugitive dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - (2) Application of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which may result in fugitive dust;
 - (3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Reasonable containment methods shall be employed during sandblasting or other similar operations;
 - (4) Covering all moving, open-bodied trucks transporting materials which may result in fugitive dust;
 - (5) Conducting agricultural operations, such as tilling of land and the application of fertilizers, in such manner as to reasonably minimize fugitive dust;
 - (6) Maintenance of roadways in a clean manner; and
 - (7) Prompt removal of earth or other materials from paved streets which have been transported there by trucking, earth-moving equipment, erosion, or other means.
- (b) Except for persons engaged in agricultural operations or persons who ~~can demonstrate to the director that are implementing~~ the best practical operation or treatment ~~is being implemented~~, no person shall cause or permit the discharge of visible fugitive dust beyond the property lot line on which the fugitive dust originates.
- (c) ~~Except for persons engaged in agricultural operations, no person shall cause or permit visible fugitive dust emissions equal to or in excess of twenty percent opacity for more than twenty-four individual readings recorded during any one-hour period. Opacity observations shall be conducted in accordance with EPA 40 CFR 51 Appendix M, Method 203B, "Visual Determination of Opacity of Emissions from Stationary Sources for Time-Exception Regulations." This rule shall be in addition to complying with paragraphs (a) and (b), including when reasonable precautions are applied and shall be applicable in all circumstances.~~

Subchapter 3 Open Burning

§11-60.1-51 Definitions. As used in this subchapter:

"Agricultural burning" means the use of open burning in agricultural operations, forest management, or range improvements.

"Agricultural operation" means a bona fide agricultural, silvicultural, or aquacultural activity for the purpose of making a profit by raising, harvesting and selling crops, or by raising and selling livestock or poultry, or produce thereof. Agricultural operation also means activities conducted by non-profit agricultural research organizations and by educational institutions for the purpose of providing agricultural instruction. The burning of animal carcasses is not an agricultural operation.

"Attended" means to be **physically present at the immediate location of the fire**, to **actively and physically** look after, or to **actively and physically** take charge of.

"Auxiliary fuels" means **butane, propane, pipeline quality natural gas, liquefied petroleum gas, or a petroleum liquid having an American Petroleum Institute gravity of at least 30.**

"Aquacultural" means dealing with the cultivation of the natural produce of water.

"Clearing of land" means the removal of nonagricultural waste or vegetation from land not currently being utilized for agricultural operations, or not associated with forest management or range improvement.

"Cooking fuel" means **any fuel that is processed, marketed, and sold by commercial establishments specifically for the cooking of food.**

"District" means a geographic area, as designated by the director, to distinguish appropriate air basins for the purpose of smoke management.

"Forest management" means wildland vegetation management using prescribed burning procedures which have been approved by the forestry division or responsible federal agency prior to the commencement of any burn and which are being conducted by a public agency or through a cooperative agreement involving a public agency. The fire department may be consulted for advice and guidance as part of the prescribed burning procedure.

"Forestry division" means the division of forestry and wildlife of the department of land and natural resources of the State of Hawaii.

"No-burn period" means any period in which agricultural burning or conditionally allowed open burning in subsection 11-60.1-52(e) is prohibited by the director as provided in section 11-60.1-55.

"Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate stack or flare.

"Range" means **an extensive area of open land on which domestic livestock or wild animals wander and graze.**

"Range improvement" means physical modification or treatment **of rangeland** which is designed to: improve production of forages; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; **and otherwise** restore, protect, and improve the conditions of the rangeland ecosystems to benefit livestock, horses, and fish and wildlife.

"Silvicultural" means dealing with the cultivation of forest trees; forestry.

§11-60.1-52 General provisions.

- (a) Except as provided in subsections (b), (c), (d), (e) and section 11-60.1-53, no person shall cause, permit, or maintain any open burning. Any open burning is the responsibility of the person owning, operating, or managing the property, premises, business establishment, or industry where the open burning is occurring. Subsections (b), (c), (d), (e) and section 11-60.1-53 shall not apply to the open burning of human remains or animal carcasses unless the activities fall under the exemptions found in paragraph (d)(2).
- (b) Subsection (a) shall not apply to attended fires for the cooking of food- **provided that:**
 - (1) **Only untreated dry wood, charcoal, natural or synthetic natural gas, butane, propane, or cooking fuel is used, and**
 - (2) **If visible smoke enters any residence, business or public area, best practical measures to eliminate the smoke, including extinguishing the fire, are taken.**

- (c) Subsection (a) shall not apply to the following, provided that notification is given to the director prior to the commencement of any burn:
 - (1) Fires set to a building, structure or simulated aircraft for training personnel in firefighting methods.
- (d) Subsection (a) shall not apply to the following, provided that the burning is approved by the director:
 - (1) ~~Fires for recreational, decorative, or ceremonial purposes~~ Outdoor fires for recreational, religious, ceremonial or decorative purposes including, but not limited to, campfires, bonfires, pottery curing fires, that are burning dry untreated wood, charcoal, or auxiliary fuels;
 - (2) Fires for the disposal of human remains and animal carcasses and debris generated from a natural disaster or catastrophic event, where there is no reasonable alternative method of disposal; ~~and~~
 - (3) ~~Other fires as approved by the director.~~ Outdoor fires set for cultural or traditional purposes and fires within cultural or traditional structures including sweat houses or lodges; and
 - (4) Fires set by any county, state or federal law enforcement agency to dispose of illegal drugs.
- (e) Subsection (a) shall not apply to the following, provided that the burning is both approved by the director, and that the burning is allowed under either section 11-60.1-55 or 11-60.1-52(f):
 - (1) Fires to abate a fire hazard, provided that the hazard is so declared by the fire department, forestry division, or federal agency having jurisdiction, and that a prescribed burning plan, if applicable, has been submitted to and approved by the jurisdictional agency;
 - (2) Fires for prevention or control of disease or pests; and
 - (3) Fires for the disposal of dangerous materials, where there is no alternate method of disposal;
- (f) The director may provide a waiver to the section 11-60.1-55 “no-burn” period for any exemption to open burning found under subsection 11-60.1-52(e).
- (g) Subsections (b), (c), (d), or (e) shall not exempt any activity from the application of any rules or requirements in any other section or chapter.

§11-60.1-53 Agricultural burning: permit applicability.

No person engaged in any agricultural operation, forest management, or range improvement shall cause or allow agricultural burning without first obtaining an agricultural burning permit from the director. Any person who fails to comply with the terms and conditions of the permit or this chapter shall be subject to the penalties and remedies provided for in sections 342B-42, 342B-44, 342B-47, and 342B-48, HRS, including the invalidation of the permit. No agricultural permit shall be granted for, or be construed to permit:

- (1) The open burning of trash, waste, or byproducts generated outside the permitted property;
- (2) The open burning of trash or other waste that has been handled or processed by factory operations, not including material from the field; or
- (3) The open burning of any waste for the clearing of land.

§11-60.1-54 Agricultural burning permit application.

- (a) Application for an agricultural burning permit shall be made on forms furnished by the director. The application shall include the following:
 - (1) Business license information or commercial agricultural activity general excise tax license, if applicable;
 - (2) Maps of areas to be burned showing fields by appropriate numbers and acreage, direction of prevailing winds, location of residential, school, and commercial establishments, public buildings, airports, and public utilities;
 - (3) The designation of fields to be burned under specified wind conditions; and
 - (4) Any other information as required and deemed necessary by the director to make a decision on the application.
- (b) To be eligible for an agricultural burning permit, the applicant must currently be involved in agricultural operations, forest management, or range improvements at the property where burning will occur, and must have legal right, title, or possession to the property, and if not the owner, must have the written authorization of the owner or owner's representative to burn on the property.
- (c) Each application shall be signed by the applicant as being true and accurate and shall constitute an agreement that the applicant shall comply with all the terms and conditions of the permit and this chapter.
- (d) The director shall not continue to act upon or consider any incomplete application. An application shall be determined to be complete only when all of the following have been complied with:
 - (1) All information required or requested pursuant to subsection (a) has been submitted;
 - (2) All documents in subsection (a) have been signed by the applicant; and
 - (3) All applicable fees have been submitted.
- (e) The application will be deemed complete sixty days after received unless the director requests the applicant to provide additional information.

§11-60.1-55 Agricultural burning or conditionally allowed open burning from subsection 11-60.1-52(e): "no-burn" periods.

(a) Except as provided in subsection (d), no person, with or without an agricultural burning permit, shall cause or allow agricultural burning or conditionally allowed open burning from subsection 11-60.1-52(e) ~~under the following conditions: when a "no-burn" period has been declared by the director.~~

~~(1) When the director determines that meteorological conditions have resulted in widespread haze on any island or in any district on the island and that these meteorological conditions will continue or deteriorate. For the purposes of this section, widespread haze shall be considered to exist when all visible ridges:~~

~~(A) Within five to ten miles have a "smoky" or bluish appearance and colors are subdued; and~~

~~(B) Beyond ten miles have a blurred appearance;~~

~~(2) When a "no-burn" period has been declared in a district and smoke from any adjacent district, as determined by the director, may impact on the affected district, the "no-burn" period shall apply to both districts.~~

(b) "No-burn" periods shall be determined by current and forecasted weather conditions which inhibit the dispersion of air pollutants. A "no-burn" period may be declared if unfavorable meteorological conditions such as high winds, temperature inversions and air stagnation are existing and forecasted to continue or deteriorate. If forecasting is unavailable, "no-burn" periods shall be determined based on visibility. ~~"No-burn" periods shall be determined by current and expected weather conditions and smoke dispersion forecasting. If forecasting is unavailable, "no-burn" periods shall be determined based on visibility.~~

(c) Visibility shall be used as the basis for determining "no-burn" periods when forecasting is not possible or not available. A "no-burn" call based on visibility shall be made under the following conditions: ~~Verification that widespread haze exists in any district may be accomplished by consultation with personnel in the appropriate district fire or police stations.~~

(1) When the director determines that meteorological conditions have resulted in widespread haze on any island or in any district on the island and that these meteorological conditions will continue or deteriorate. For the purposes of this section, widespread haze shall be considered to exist when all visible ridges:

(A) Within five to ten miles have a "smoky" or bluish appearance and colors are subdued; and

(B) Beyond ten miles have a blurred appearance;

(2) When a "no-burn" period has been declared in a district and smoke from any adjacent district, as determined by the director, may impact on the affected district, the "no-burn" period shall apply to both districts; or

(3) On the island of Oahu either when the condition specified in paragraph (1) or (2) occurs or when meteorological conditions have resulted in a rise of the carbon

monoxide level exceeding five mg/m³ for an eight-hour average or the PM₁₀ level exceeding one hundred thirty five µg/m³ for twenty-four hours and when the director determines that these meteorological conditions will continue or deteriorate.

- (d) Verification that widespread haze exists in any district may be accomplished by consultation with department personnel in the appropriate district.
- (e) Notices of "no-burn" periods for the specified islands or districts may be posted on a department web page and shall apply to a specified "no burn" period.
- (f)(e) In a district where a long-term "no burn" declaration is in effect, the director may provide a waiver during an agricultural "no burn" period for the control of plant diseases or infestations when burning is determined to be the **sole best available** method of control.

§11-60.1-56 Agricultural burning: recordkeeping and monitoring. Each permittee shall monitor and maintain records in accordance with the agricultural burning permit issued by the director.

§11-60.1-57 Agricultural burning: action on application.

- (a) The director shall act on a complete application within a reasonable time, but not to exceed ninety calendar days from the date the complete application is received, and shall notify the applicant in writing of the approval or denial of the application. If the director has not acted on an application within the ninety calendar-day period, the application shall be deemed to have been approved.
- (b) If an application is denied, the applicant may request in writing, a re-evaluation of the application to the director.
- (c) If the application is denied after the reevaluation, the applicant may request a hearing in accordance with chapter 91, HRS.
- (d) The permit may be granted for a period of up to one year from the date of issuance.
- (e) At the director's sole discretion or the application of any person, the director may terminate, suspend, reopen, or amend a permit if, after affording the applicant a hearing in accordance with chapter 91, HRS, it is determined that:
 - (1) Any condition of the permit has been violated;
 - (2) Any provision of this chapter has been violated;
 - (3) Any provision of chapter 342B, HRS, has been violated;
 - (4) The maintenance or attainment of NAAQS and state ambient air quality standards will be interfered with; or
 - (5) The action is in the public interest. (f) The permit shall not be transferable whether by operation of law or otherwise or from one person to another.
- (f) The permit shall not be transferable whether by operation of law or otherwise or from one person to another.

§11-60.1-58 Agricultural burning: permit content. The director shall consider and incorporate the following elements into an agricultural burning permit, as applicable:

- (1) Notification of appropriate authorities prior to each burn;

- (2) The type and amount of material allowed to be burned and the time period(s) when burning is allowed;
- (3) Proper fire and safety control measures;
- (4) Operator or permittee must allow the director or an authorized representative, upon presentation of credentials, to enter the burn location and inspect, all facilities, practices, and operations, or records covered under the terms and conditions of the permit; and
- (5) Any other provision to assure compliance with all applicable requirements of HAR Chapter 11-60.1.