

**PROPOSED RULE 444.1 PARTICULATE MATTER EMISSION REDUCTIONS
FROM FORESTRY AND AGRICULTURAL WASTE**

(RULE INDEX TO BE ADDED AFTER ADOPTION)

(a) Purpose

The purpose of this rule is to reduce particulate matter emissions from forestry and Agricultural Waste management practices and establish requirements for equipment used to reduce Vegetative Waste.

(b) Applicability

The provisions of this rule shall apply to owners and operators of Air Curtain Incinerators and Prescribed Fire Vehicles.

(c) Definitions

For the purposes of this rule, the following definitions shall apply:

- (1) AGRICULTURAL OPERATIONS means any business occurring on a ranch or farm directly related to:
 - (A) Growing of crops; or
 - (B) Conducting agricultural research or instruction by an educational institution.
- (2) AGRICULTURAL WASTE means unwanted or unsalable plant materials produced wholly from Agricultural Operations. Agricultural Wastes do not include items such as metal, wire, plastic, rubber, ornamental or landscape vegetation, chemically treated wood including chemically treated grape stakes, shop wastes, construction and demolition material, material containing asbestos, garbage, oil filters, tires, tar paper, pesticide and fertilizer containers, broken boxes, pallets, sweat boxes, packaging material, packing boxes or any other material produced in the packaging or processing of agricultural products. Orchard or vineyard waste or any other material, generated as a result of land use conversion to nonagricultural purposes is not Agricultural Waste.
- (3) AIR CURTAIN INCINERATOR means an incinerator, carbonator, or mechanized burner that operates by forcefully projecting a curtain of air across

an open, integrated combustion chamber or open pit or trench in which combustion occurs.

- (4) BURN AUTHORIZATION NUMBER means the number that is assigned to a burn project upon being granted approval by the Executive Officer.
- (5) CONTRACTOR means a person or company who performs a service for a separate entity under a valid and current contract. Contractor includes government grant recipients.
- (6) CONTROLLED SUBSTANCE means any drug, substance, or immediate precursor which is listed in Schedules I through V of the Uniform Controlled Substances Act, codified in the California Health and Safety Code Division 10.
- (7) PRESCRIBED FIRE VEHICLE means a mobile machine designed for wildfire prevention by performing mechanized controlled burns of low-growth vegetation to create fuel breaks.
- (8) SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the school in kindergarten through grade 12. School also means an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as preschools, Early Head Start, Head Start, First Five, and Child Development Centers. A School does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property.
- (9) SENSITIVE RECEPTOR means any residence including private homes, condominiums, apartments, and living quarters; Schools as defined in paragraph (c)(8); daycare centers; and health care facilities such as hospitals or retirement and nursing homes. Sensitive Receptor includes long-term care hospitals, hospices, prisons, and dormitories or similar live-in housing.
- (10) VEGETATIVE WASTE means Wood Waste, Yard Waste, and Agricultural Waste.
- (11) WOOD WASTE means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, and tree limbs (whole or chipped). Wood Waste does not include grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands, construction, renovation, or demolition wastes.

(12) YARD WASTE means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. Yard Waste comes from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard Waste does include construction, renovation, and demolition wastes.

(d) General Requirements

- (1) An owner or operator shall burn solely Vegetative Waste in an Air Curtain Incinerator or Prescribed Fire Vehicle.
- (2) An Air Curtain Incinerator or Prescribed Fire Vehicle shall be operated solely by government agencies or their Contractors.
- (3) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall ensure the equipment is properly maintained and kept in good operating condition at all times to minimize emissions of air contaminants into the atmosphere.
- (4) An owner or operator shall not operate an Air Curtain Incinerator or Prescribed Fire Vehicle to burn Vegetative Waste when wind speeds reach 20 mph or more.
- (5) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall handle, store, and dispose of any ash removed or generated from equipment in a manner minimizing visible emissions in the atmosphere.
- (6) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall obtain a Burn Authorization Number from the Executive Officer for each day and for each location of operation.
 - (A) The owner or operator shall request the Burn Authorization Number by 4:00 pm on the day prior to the burn.

(e) Air Curtain Incinerator Operating Requirements

- (1) An owner or operator of an Air Curtain Incinerator shall comply with the following when conducting a cold start:
 - (A) Use a propane torch, drip torch, or flare to ignite the material inside the combustion chamber; and
 - (B) Not use accelerants, including but not limited to gasoline, diesel fuel, kerosene, and turpentine.

- (2) An owner or operator shall ensure any internal combustion engine used to power the air curtain in an Air Curtain Incinerator meets U.S. EPA Tier 4 emission standards.
 - (3) An owner or operator of an Air Curtain Incinerator shall ensure sulfur content of any diesel fuel consumed meets California Air Resources Board standards in Title 13 CCR Section 2281.
 - (4) An owner or operator of an Air Curtain Incinerator shall load Vegetative Waste such that it remains below the manufacturer's maximum loading capacity and below the level of the air curtain.
 - (5) An owner or operator shall monitor the Air Curtain Incinerator at all times when materials are actively burning or flames are visible inside the combustion chamber.
 - (6) An owner or operator of an Air Curtain Incinerator shall ensure the air curtain is operated continuously according to the manufacturer's recommended airflow setting until there are no visible flames and the waste is burned to completion.
 - (7) An owner or operator of an Air Curtain Incinerator shall not allow ashes to accumulate to greater than 1/3 the depth of the combustion chamber, or to a level that impedes combustion, whichever occurs first.
- (f) Air Curtain Incinerator Monitoring Requirements
- (1) An owner or operator shall conduct an initial test for opacity within 60 days after the Air Curtain Incinerator reaches the charge rate at which it will operate, but no later than 180 days after its initial startup.
 - (2) An owner or operator of an Air Curtain Incinerator shall conduct opacity testing a minimum of once every 12 calendar months from the date of initial startup.
 - (3) An owner or operator of an Air Curtain Incinerator shall conduct opacity testing using U.S. EPA Method 9.
 - (4) An owner or operator of an Air Curtain Incinerator shall ensure opacity testing is conducted by an observer with a current and valid certification to perform U.S. EPA Method 9.
 - (5) An owner or operator of an Air Curtain Incinerator shall not cause or allow visible emissions into the atmosphere to exceed 10 percent opacity (6-minute average), except during the startup period.
 - (6) An owner or operator of an Air Curtain Incinerator shall not cause or allow opacity to exceed 35 percent (6-minute average) during the startup period, which shall not exceed the first 30 minutes of operation.

(g) Prohibitions

- (1) An owner or operator shall not use an Air Curtain Incinerator or Prescribed Fire Vehicle to burn a Controlled Substance.
- (2) An owner or operator shall not operate an Air Curtain Incinerator within 1,000 feet of a Sensitive Receptor.

(h) Maintenance Requirements

- (1) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall perform maintenance per the manufacturer's recommendations as specified in the operating and maintenance manual.
- (2) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall keep a copy of the manufacturer's operating and maintenance manual and make it available to the Executive Officer within 48 hours of request.

(i) Source Testing

An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall provide access and allow the Executive Officer to conduct a source test within 6 months of the initial request from the Executive Officer.

(j) Recordkeeping

An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall keep records to demonstrate compliance with the provisions of this rule, and all records and information recorded pursuant to this subdivision shall be made available to the Executive Officer upon request.

- (1) An owner or operator of an Air Curtain Incinerator shall keep visible emissions records and records of current and valid U.S. EPA Method 9 certification pursuant to subdivision (f) and maintain records for a minimum of five years.
- (2) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall maintain records for a minimum of five years and keep a daily log with the following information for each new location the equipment is operated:
 - (A) Date and total hours of operation;
 - (B) Name of owner or operator and physical address or legal description of location of each operation;
 - (C) Type(s) of materials burned;
 - (D) Quantity (tons) of materials burned; and
 - (E) Engine fuel type.

- (3) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall keep a keep a maintenance log and maintain records for a minimum of 5 years.
- (4) An owner or operator of an Air Curtain Incinerator or Prescribed Fire Vehicle shall keep a copy of the contract with the government agency for which they are performing a service, if applicable.