A MODEL ORDINANCE PERTAINING
TO THE REDUCTION OF AIR POLLUTION BY REGULATING
WOOD-BURNING DEVICES

BE IT ORDAINED BY the [City or County] of
[ ]:

WHEREAS, the United States Environmental Protection Agency (E.P.A) adopted a
fine particulate matter (PM$_{2.5}$) National Ambient Air Quality Standard (NAAQS) in 2006, and levels for the PM$_{2.5}$ NAAQS were selected to protect the health of people who are sensitive to exposure to fine particles; and

WHEREAS, research indicates that wood smoke is a significant contributor to PM$_{2.5}$ levels that pose significant health risks; and

WHEREAS, the Bay Area Air Quality Management District (BAAQMD) adopted Regulation 6, Rule 3: Wood-burning Devices in 2008 to reduce particulate matter pollution within the Bay Area and protect Bay Area residents from the negative public health impacts of wood smoke pollution. Among other things, Regulation 6, Rule 3 bans wood burning during Winter Spare the Air alerts, limits excess visible smoke, prohibits burning garbage, restricts the sale and installation of non-E.P.A. certified wood-burning devices and requires labeling on firewood and solid fuels within the Air District; and

WHEREAS, the [City or County] of [ ] finds that it shall be unlawful to violate any provisions of the BAAQMD Regulation 6, Rule 3. ; and

WHEREAS, the [City or County] of [ ] desires to lessen the risk to life and property from air pollution from wood-burning devices; and
WHEREAS, the [City or County] of [ ] finds a need exists to adopt regulations which apply to wood-burning device emissions; [and]

[Also include the following “WHEREAS” recital when Option 14, Private Enforcement of Wood Smoke Nuisance Ordinance is chosen as an option for inclusion in the City or County ordinance:]

WHEREAS, the [City or County] of [ ] finds there is a need for a private legal cause of action that defines the circumstances under which operation of a wood-burning device is likely to create a health hazard, declares such operation a nuisance, and provides a process that encourages resolution of disputes about such nuisances through informal meetings and mediation, before they may be taken to court.]

The [ ] Code shall be amended by adding the following:

APPLICABILITY: This ordinance shall apply within the limits of the [City or County] of [ ] as specified herein.

All wood-burning devices installed in existing or new residential units or wood-burning devices being added to or replacing wood-burning devices in existing residential units shall comply with this ordinance.

All wood-burning devices installed in existing or new commercial buildings or wood-burning devices being added to or replacing a wood-burning device in
existing commercial buildings shall comply with this ordinance. Commercial
buildings shall include, but shall not be limited to, hotels and restaurants.

Gas fireplaces shall be exempt from this ordinance. However, the conversion
of a gas fireplace to burn wood shall constitute the installation of a wood-
burning device and shall be subject to the requirements of this ordinance.

A wood-burning device shall comply with this ordinance if (1) it is existing
(2) it is reconstructed, (3) additions, alterations, or repairs are made to
the device, or (4) the residential unit or commercial building in which the
device is located is renovated, and/or the renovation includes opening up
walls immediately adjacent to the device.

DEFINITIONS: [Include definitions below which are applicable to the ordinance
overall and applicable to any options chosen for inclusion in the City or
County ordinance.]

1. “Bay Area Air Quality Management District (BAAQMD)” means the air
quality agency for the San Francisco Bay Area pursuant to California Health
and Safety Code Section 40200.

2. “BAAQMD Winter Spare the Air Alert” means any curtailment period so
declared to the public by the Air Pollution Control Officer (APCO) of the
BAAQMD when a negative impact upon public health is anticipated, resulting
from PM$_{2.5}$ levels forecast to exceed 35 micrograms/m$^3$.

3. "Complaining party" means any person who wishes to limit another
person’s use of a wood-burning device.

5. “E.P.A. certified” means any wood-burning device that meets the standards in Title 40, Part 60, Subpart AAA, Code of Federal Regulations in effect at the time of installation and is certified and labeled pursuant to those regulations or as amended. This definition applies only to CERTIFIED devices and NOT to devices that are QUALIFIED under the E.P.A.-Qualified wood-burning fireplace program or any other certification program or other approval program by any other agency or entity.

6. “Fireplace” means any permanently installed masonry or factory-built wood-burning device, except a pellet-fueled wood-burning device, designed to be used with an air-to-fuel ratio greater than or equal to 35 to 1.

7. “Garbage means all solid, semisolid and liquid wastes generated from residential, commercial and industrial sources, including but not limited to: magazines, junk mail, financial statements, plastic products, used pallets, driftwood, plywood, particle board, coal, Styrofoam, wrappers, trash, refuse, rubbish, industrial wastes, asphaltic products, manure, compost, vegetable or animal solids and semisolid wastes, and other discarded solid and semisolid wastes.

8. “Gas fireplace” means any device designed to burn natural gas exclusively in a manner that cannot burn solid fuel at any point during its construction.

9. "Immediate neighbor" means a resident of a building on a parcel that abuts or confronts a property with a wood-burning device or a building that has a direct line of sight from the highest residential floor to the source of the smoke, and who resides within 120 feet of a source of wood smoke. However a person is not an immediate neighbor if there is an impermeable surface, such as a wall or structure, which blocks the line of sight between
the source of smoke and the top of the highest residential floor of the
building in which resident lives.

10. “Improper fuel” includes, but is not limited to, garbage, treated wood,
non-seasoned wood, used or contaminated wood pallets, plastic products,
rubber products, waste petroleum products, paints and paint solvents, coal,
animal carcasses, glossy and/or colored paper, salt water driftwood, particle
board, and any material not intended by a manufacturer for use as a fuel in a
wood-burning device. Improper fuel may be evidenced by smoke or odor.

11. “Non-compliant device” means any wood-burning device that is not E.P.A.
certified or pellet-fueled.

12. “Paint solvents” means all solvents sold or used to thin paints or to
cleanup painting equipment.

13. “Pellet-fueled device” means any wood-burning device that operates
exclusively on wood pellets.

14. “Ringelmann Chart” means a numerical ranking system whereby graduated
shades of gray varying by five equal steps between white and black are
visually compared to the density of smoke. The chart, as distributed by the
United States Bureau of Mines, provides the graduated shades 1, 2, 3, 4 and 5,
which are known as Ringelmann No.1, 2, 3, 4 and 5, respectively. The system
is used in determining whether emissions of smoke are within the limits or
standards of opacity.

15. “Solid fuel” means wood or any other non-gaseous or non-liquid fuel.

16. “Smoke health hazard” means operation of a non-compliant wood-burning
device or operation of a compliant wood-burning device in a manner not
consistent with the manufacturer’s instructions, including burning improper
fuel.
17. “Treated wood” means wood of any species that has been chemically impregnated, painted or similarly modified to improve resistance to insects or weathering.

18. “Visible Emissions” means emissions which are visually perceived by an observer. Restrictions on visible emissions in this ordinance are expressed as numbers on the Ringlemann Chart, as published by the United States Bureau of Mines.

19. “Waste petroleum products” means any petroleum product other than gaseous fuels that has been refined from crude oil, and has been used, and as a result of use, has been contaminated with physical or chemical impurities.

20. “Wood-burning device” means any wood-burning stove or heater, pellet-fueled device, fireplace, or any device used to burn any solid fuel for space-heating or aesthetic purposes.

21. “Wood-burning device operator” means any individual, corporation or other entity operating a wood-burning device.

REQUIREMENTS [ ] [City or County] may include all or some of the following depending upon the requirements that [ ] [City or County] determines will be applicable to their jurisdiction:

Option 1. **BAAQMD Winter Spare the Air Alert**: It shall be unlawful to use any wood-burning device when the Bay Area Air Quality Management District issues a “Winter Spare the Air Alert” warning.

Option 2. **Visible Emissions Limitation**: No person shall cause or allow a visible emission from any wood-burning device in any building or structure that exceeds No. 1 on the Ringlemann Chart or 20 percent opacity for a period or periods aggregating more than three consecutive minutes in
any one hour period. Visible emissions created during a fifteen minute
start-up period are exempt from this regulation. [Note: there are
significant training requirements for any personnel enforcing this
standard - participation in an initial 40 hour course with every 6 months
smoke school refresher course with certification requirement; for night
reading certification, an additional course is required every 6 months.]

Option 3. **Installations – Wood-burning Devices:** Where there is
propane, natural gas and/or electrical service, it shall be unlawful to
install any wood-burning device. If there is no propane, no natural gas
and/or no electrical service, a wood-burning device that is either an
E.P.A. certified or a pellet-fueled device may be installed.

3a. Any person who plans to install a wood-burning device must submit
documentation to the Building/Planning Department of [     ] [City or
County] demonstrating that the residence/business does not have access
to propane, natural gas and/or electrical service.

Option 4. **Sales Prohibition of Outdoor Wood-burning Devices:** It shall
be unlawful to sell, offer for sale or buy any portable or permanently
installed outside wood-burning device including but not limited to, burn
bowls, chimineas, fireplaces, or similar outdoor wood-burning devices
within the boundaries of [     ] [City or County].

Option 5. **Prohibition of Indoor Wood-burning Devices:** It shall be
unlawful to install a new or used indoor wood-burning device.

Option 6. **Prohibition of Outdoor Wood-Burning Devices:** It shall be
unlawful to install and/or use outdoor fireplaces, chimineas, burn bowls,
or similar outdoor wood-burning devices.
Option 7. **Real Estate Transfer:** It shall be unlawful to sell and/or transfer real estate that contains a wood-burning device that is not E.P.A. certified or pellet-fueled at the time of a real estate sale/change of ownership. Such wood-burning devices, including all inside and outside devices, shall be removed prior to real estate sale/change in ownership and/or title.

Option 8. **Device Maintenance Requirements:** It shall be unlawful to operate a wood-burning device unless it has been maintained and inspected [insert frequency as applicable for City or County, e.g., annually, every 2, 3, 4 or 5 years] by a qualified hearth industry specialist. The [insert frequency] maintenance records shall be submitted to the [City or County] Building/Planning Department by June 15 of the year after the required maintenance/inspection was conducted.

Option 9. **Registration of Wood-burning Devices:** Effective [XXX date], it shall be unlawful to operate a wood-burning device unless the device is registered with the Building/Planning Department of [City or County] and the owner/operator has paid the required registration fee in the amount of [ ]. The fee is required to implement and enforce this ordinance/chapter.

Option 10. **Removal of Non-compliant Devices Upon Remodel:** A non-certified device, free-standing or insert, shall be removed, rendered inoperable or replaced with an E.P.A. certified device or pellet-fueled device when a building permit is required and:

10a. A remodel or addition exceeds [XXX - e.g., 300-500] square feet; or
10b. the combination of the addition, alteration or remodeling exceeds 50% of the floor area of the existing structure; or
10c. a renovation includes opening up walls immediately adjacent to the wood-burning device.

Option 11. **Operation of Non-Compliant Wood-burning Devices:** Effective [XXX date], it shall be unlawful to use any non-E.P.A. certified device or non-pellet-fueled device on any property within the boundaries of the [City or County]. [May also include the following if applicable for City of County: After that date, all noncompliant wood-burning devices shall be rendered inoperable (as determined by the Building/Planning Department Official) or removed.] The Building/Planning Department Official may grant an exemption in cases of extreme hardship.

Option 12. **Allowable Burn Days:** Effective [XXX date] from November 1 through February 28 each year, it shall be unlawful to operate any type of indoor or outdoor wood-burning device unless the [City or County] has posted the day to be an “Allowable Burn Day.” The City shall determine Allowable Burn Days according to the air quality forecasts made on the day prior by 1400 hours. Allowable Burn Days shall only occur on days for which the Bay Area Air Quality Management District has forecast the Air Quality Index (AQI) for PM$_{2.5}$ to be either in the Good [Range 0-50] or within the AQI Moderate Range from 51-75. AQI forecasts in the Moderate Range >75 to 100 or higher AQI ranges shall not be Allowable Burn Days.

Option 13. **Wood-burning Ban:** Effective January 1, 2016 [or alternate date], use of any type of indoor or outdoor wood-burning device shall be banned at all times from November 1 through February 28 each year. Effective January 1, 2020 [or alternate date], use of any type of indoor
or outdoor wood-burning device shall be banned at all times of the year. The Building/Planning Department Official may grant an exemption in cases of extreme hardship.

Option 14. Private Enforcement of Woodsmoke Nuisance Ordinance

14a. Enforcement: A smoke health hazard under this ordinance/chapter is not a misdemeanor or infraction, and the enforcement of this ordinance/chapter shall be by private parties only. The complaining party shall have the right to bring injunctive action to enforce any restorative action ordered pursuant to this ordinance/chapter.

14b. Dispute Resolution: The following procedures shall be followed in the resolution of disputes about smoke health hazards (also including burning garbage and/or other inappropriate materials) under this ordinance/chapter.

14b(1). Initial Reconciliation: A person who believes that the operation of a wood-burning device has created a smoke health hazard shall notify the wood-burning device operator in writing, within 30 days of an occurrence of an alleged smoke health hazard. The letter of notification must include a description of the problem and a reference to this ordinance/chapter. The notification should, if possible, be preceded by personal discussions to enable the complaining party and wood-burning device operator to attempt to reach a mutually agreeable solution. Potential solutions may include, but are not limited to: changing the frequency, duration, or timing of wood-burning; using the wood-burning device only during certain weather conditions;
or operating the wood-burning device only when the complaining party is not at home; and prohibiting burning of garbage or other inappropriate materials at any time.

14b(2). Mediation: If an initial reconciliation attempt under subdivision 14b(1) fails, the complaining party shall propose mediation, in writing. The wood-burning device operator may accept this proposal within 30 days. If the operator does not do so, the complaining party may file an action in Superior Court pursuant to subdivision 14b(4) below. If mediation is elected, the parties shall mutually agree upon a mediator and split the costs thereof.

14b(3). Binding arbitration: In those cases where the initial reconciliation process fails and where mediation has not resolved the dispute, the complaining party may offer to submit the dispute to binding arbitration and the operator may elect binding arbitration. The identity of the arbitrator shall be agreed upon by both the complaining party and the operator, who shall indicate such agreement in writing. The arbitrator shall follow the provisions of this ordinance/chapter to reach a fair resolution of the complaint and shall submit a complete written report to the complaining party and the operator. This report shall include the arbitrator's findings (including the arbitrator shall order such remedial action as may be necessary to prevent further smoke health hazards and remedial actions may not require, but may allow as an option, physical
changes to the operator’s wood-burning device, chimney or property) and a list of all mandated remedial actions, with any appropriate conditions concerning such actions, including a schedule by which the ordered mandates must be completed.

14b(4). Litigation: In those cases where initial reconciliation and mediation fail, and binding arbitration is not elected, the complaining party may file an action in a court of competent jurisdiction for resolution of the smoke health hazard claim under the provisions of this ordinance/chapter. The litigant must state in the lawsuit that arbitration was offered and not accepted.

14c. Remedies: The mediator shall recommend or the arbitrator or court shall order such remedial action as may be necessary to prevent further smoke health hazards.

GENERAL REQUIREMENTS [To be included in all ordinances]:

ENFORCEMENT:
Any person violating any of the provisions of this ordinance/chapter shall be deemed guilty of a misdemeanor and upon conviction shall be punishable as provided by law. [This Enforcement section is not applicable and shall not be included if only Option 14 is chosen for inclusion in the ordinance.]

IF ANY SECTION, subsection, sentence, clause or phrase or word of this ordinance/chapter is for any reason held to be unconstitutional by a court of
competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance/chapter.

The [ ] of the [City or County] of [ ] hereby declare that it would have passed and adopted this ordinance and all provisions thereof irrespective of the fact that any one or more of said provision be declared unconstitutional.

INTRODUCED and ordered Posted/Published this [ ] day of [ ].

ADOPTED this [ ] day of [ ], by the following vote:

AYES: ____________________________________________
NOES: ____________________________________________
ABSENT: __________________________________________
ABSTAIN: __________________________________________

ATTEST: APPROVED AS TO FORM:
__________________________________________
__________________________________________