

Planning and Development Department
Toxics Management Division

Community Environmental Advisory Commission

AGENDA FOR REGULAR MEETING OF THURSDAY, JANUARY 5, 2006, 7:00 PM

First Floor Conference Room, 2118 Milvia Street, Berkeley.

Please refrain from wearing scented products. To request a meeting agenda in large print, Assistive Listening Devices, Braille, or on cassette, or to request a sign language interpreter for the meeting, call FIVE WORKING DAYS PRIOR TO THE MEETING to ensure availability.

- I. **Call to Order and Roll Call**
- II. **Action Minutes Review/Adoption**
- III. **CEAC Action Tracker**
- IV. **Report from the Chair:** Issel resigns. Clerk's memo about amending action items.
- V. **Comments from the Public**
- VI. **Agenda Prioritization**
- VII. **Reports from Subcommittees and Taskforce Delegates**
 - a) Creeks Taskforce – **Harris** 7:15 PM
- VIII. **Toxics Management Division Report**
 - a) Enforcement.
 - b) Clean up.
 - c) Budget.
 - d) Staffing.
- IX. **Discussion/Action:**
 - a) Lawrence Berkeley National Laboratory (LBNL)
Clean up, Deed Restriction on use of groundwater in watershed – **Wood**
 - b) Precautionary Principle – **MacKusick**
 - c) Wood burning restrictions – **Clear**
 - d) Community Action Group on LBNL clean up – **Wood**
 - e) Recommendation to Council on nanoparticles at Molecular Foundry – **Wood**
 - f) Response to Council's request to host updates on LBNL Environmental Restoration Program – **Wood**
- X. **Announcements from Commissioners (3 Minute Limit)**
- XI. **From Public to Commission**
- XII. **Information Items:** a) Draft motion on Precautionary Principle – S. MacKusick. b) Summary of City Attorney changes to Precautionary Principle previously reviewed by CEAC – S. MacKusick. c) Original Precautionary Principle ordinance showing edits by City Attorneys – S. MacKusick. d) Mill Valley Wood Smoke ordinance. e) DRAFT CEAC recommendation to City Council to adopt an ordinance of wood smoke nuisance conditions – R. Clear. f) DRAFT recommendation and background information on LBNL's Deed Restriction – L A Wood.
- XIII. **To be distributed:** a)
- XIV. **Next Agenda**

January 5, 2006 Motion

In accordance with Resolution 62,259, adopted on October 14, 2003, staff has prepared a Precautionary Principle ordinance whose purpose is to promote the health, safety and general welfare of the community by minimizing health risks, improving air quality, protecting the quality of ground and surface water, minimizing the consumption of resources and minimizing the City's contribution to global climate change. CEAC urges council to approve this ordinance.

Major changes to Precautionary Principle Ordinance by City Attorneys:

1. The entire narrative that lists City Council “findings” in the original “*Section 1: The Council finds as follows:*” was deleted. This section provided a context for the Council decision and highlighted historical problems and set forth general goals of the Precautionary Principle.
2. Section 12.29.017 listing “Precautionary Principle Program Goals” was deleted, despite the fact that the language was taken directly from “resolved” language in the Precautionary Principle Resolution 62,259—N.S..
3. The proposed “Precautionary Principle Policy Statement” was entirely deleted. The “substitute” for a policy statement is language in 12.29.020 Definitions, Section B which states that the “*Precautionary Principle*” approach shall mean a course of action and decision-making ... guided by the following tenets:”

The Resolution directed staff to set “...forth the City’s general policy of precautionary decision-making consistent with this Resolution.” [Does a “definition” suffice for a “policy statement?”]

4. Section 12.29.012 listing tenets of the Precautionary Principle was deleted, although similar language was added to definitions. [Check out “subtle” changes in language, especially deletion of “imperatives.”]
5. The entire section 12.29.015 Findings was deleted. This section provided commentary on full disclosure, transparency and declarations of impact and intent.
6. A new section detailing recent City Council actions was added. This information was included in the AdHoc committee proposed version of the ordinance in a brief paragraph in the “findings” section.
7. The “Precautionary Principle Program Elements” section was deleted, and the substitute language, now called “*Precautionary Principle Limited to Promotion of General Welfare*” only addresses cautionary language explaining what the Precautionary Principle does not do. Original language included statements such as “shall implement” and “shall take the precautionary principle into consideration” during the decision-making process.

Original text from AdHoc Committee; changes by City Attorney

ORDINANCE NO. -N.S.

ADDING BERKELEY MUNICIPAL CODE CHAPTER 12.29 ENTITLED THE PRECAUTIONARY PRINCIPLE

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1: That Chapter 12.29 is added to the Berkeley Municipal Code to read as follows:

Section 1: ~~The Council finds as follows:~~

~~a. The City of Berkeley is charged with protecting the public health and welfare of its residents and workers and the environment, and is aware of its responsibility to the larger global community; and~~

~~b. Every Berkeley resident and worker has an equal right to a safe and healthy environment. This requires that our air, water, earth, and food be of a sufficiently high standard that individuals and communities can live healthy, fulfilling, and dignified lives; and~~

~~d. Laws that regulate the release of toxic chemicals frequently allow some risk to the public and the environment, and place the burden of proof on government agencies or the public to conclusively demonstrate harm before regulatory action to reduce or eliminate harm from toxic exposure; and~~

~~e. While human activities involve risk, governments and society must proceed more carefully than they have in the recent past; corporations, government entities, organizations, communities and scientists should adopt a precautionary approach to human endeavors in order to protect human health and the environment; and~~

~~f. Berkeley is a leader in making choices based on the least environmentally harmful practices and products, thereby challenging traditional assumptions about risk management. Numerous City ordinances and policies including: Integrated Pest Management; mandate for recyclable and degradable food packaging; prohibition of polystyrene foam food packaging; emphasis on fuel-efficient vehicles; bans on arsenic, creosote and pentachlorophenol-treated wood; ban on new open fireplaces; and the Green Building program, apply a precautionary approach to specific City purchases and activities. Internationally, this model is called the Precautionary Principle; and~~

~~g. Science and technology are creating new solutions to prevent or mitigate environmental problems. However, science is also creating new compounds and chemicals that are already finding their way into our environment and causing other new problems. New legislation may be required to address these situations, and the Precautionary Principle is intended as a tool to help promote environmentally healthy alternatives while weeding out the negative and often unintended consequences of new technologies; and~~

~~h. Transforming our society to realize these goals and achieving a society living respectfully within the bounds of nature will take a behavioral as well as technological revolution. The Precautionary approach to decision-making will help Berkeley speed this process of change by moving beyond finding cures for environmental ills to preventing the ills before they can do harm; and~~

~~i. The City of Berkeley sees the Precautionary Principle approach as a policy framework to foster development of laws for a healthier and more just Berkeley. By doing so, the City will help create and maintain a healthy, livable Bay Area environment for current and future generations, and will become a model of sustainability.~~

~~Section 2. That Chapter 12.29, Precautionary Principle, is hereby added to Berkeley Municipal Code (BMC), Title 12, Health and Safety, to read as follows:~~

Chapter 12.29

PRECAUTIONARY PRINCIPLE

Sections:

- 12.29.010 Purpose**
- 12.29.020 Definitions**
- ~~12.29.011 Precautionary Principle Policy Statement~~
- ~~12.29.012 Primary tenets of the Precautionary Principle (See 12.29.20)~~
- ~~12.29.015 Findings~~
- ~~12.29.017 Precautionary Principle Program Goals~~
- ~~12.29.020 Precautionary Principle Program Elements (See 12.29.060)~~
- 12.29.030 Application of Precautionary Principle by City in Existing**

Policies.

- 12.29.040 Application of Precautionary Principle by City in Future Policies.**
- 12.29.050 Bi-annual Report on Implementing Actions**
- 12.29.060 Precautionary Principle Limited to Promotion of General Welfare.**
- 12.29.070 Severability.**
- 12.29.10 Purpose**

The purpose of this ordinance is

~~A. To reduce negative impacts to human health and the environment by requiring a careful analysis of alternatives using the best available science, to select the least harmful alternative.~~

~~B. To ensure public participation and a transparent decision-making process in the analysis and selection of potential alternatives.~~

The purpose of this chapter is to promote the health, safety, and general welfare of the community by minimizing health risks, improving air quality, protecting the quality of ground and surface water, minimizing consumption of resources, and minimizing the City's contribution to global climate change by requiring that in all of its decisions the City shall use a precautionary principle approach as defined herein.

12.29.12 Primary Tenets of the Precautionary Principle (See Definitions)

~~Where there are reasonable grounds for concern, the precautionary approach to decision-making includes:~~

- ~~!—Anticipatory Action: There is a duty to take anticipatory action to prevent harm. government, business, and community groups, as well as the general public, share this responsibility.~~
- ~~!—Right to Know: The community has a right to know complete and accurate information on potential human health and environmental impacts associated with the selection of products, services, operations or plans. The burden to supply this information lies with the proponent, not with the general public or government.~~
- ~~!—Alternatives Assessment: An obligation exists to examine a full range of alternatives and select the alternative with the least potential impact on human health and the environment including the alternative of doing nothing.~~
- ~~!—Full Cost Accounting: When evaluating potential alternatives, there is a duty to consider all the costs, including raw materials, manufacturing, transportation, use, cleanup, eventual disposal, and health costs even if such costs are not reflected in the initial price. Short and long term time thresholds should be considered when making decisions.~~
- ~~!—Participatory Decision Process: Decisions applying the Precautionary Principle must be transparent, participatory, and informed by the best available information.~~

Section 12.29.020 Definitions

~~Unless otherwise defined below, words in this Chapter shall have the same meanings as those words within Berkeley Municipal Code, Title 12, Health and Safety~~

~~A. **Precautionary approach** is the careful assessment of available alternatives using the best available science to select alternatives that present the least known threat to human and environmental health. Assessment of available alternatives examines a broad range of options in order to provide information on the effects of different options considering short-term versus long-term effects and costs, and evaluating and comparing the adverse or probable adverse effects of each option. This process asks these fundamental questions: "Is this potentially hazardous activity necessary?" "What less hazardous options are available?" and "How little damage is possible?"~~

~~B. **"Environmentally Preferable"** shall refer to a product or service which is determined to have a lesser negative impact on human health and the environment compared to other, similar products or services.~~

Whenever any of the words hereinafter defined are used in this chapter, they shall be construed to mean the following:

A. "City" shall mean, for the purposes of this chapter, the City of Berkeley.

B. "Precautionary Principle" approach shall mean a course of action and decision-making by the City guided by the following tenets:

! Anticipatory Action: Anticipatory action prevents harm. Government, business, community groups, and the public share this responsibility.

! Right to Know: The community has a right to know complete and accurate information on potential health and environmental impacts associated with the selection of products, services, operations or plans.

! Alternatives Assessment: Examine a full range of alternatives and select the alternative with the least potential impact on health and the environment including the alternative of doing nothing.

! Consideration of Full Costs: Consider short-term and long-term costs in comparing product alternatives, when feasible. This includes evaluation of total costs expected during the time a product is owned, including, but not limited to, acquisition, extended warranties, operation, supplies, maintenance, disposal costs and expected lifetime compared to other alternatives.

! Participatory Decision Process: Decisions applying the Precautionary Principle should be transparent, participatory, and informed by the best available information.

~~Section 12.29.011—Precautionary Principle Policy Statement~~

The following shall constitute the City of Berkeley's Precautionary Principle policy:

~~Where threats of serious or irreversible damage to people or nature exist, lack of full scientific certainty about cause and effect shall not be viewed as sufficient reason for the City to postpone measures to prevent the degradation of the environment or protect the health of its residents and workers. Any gaps in scientific data uncovered by the examination of alternatives will provide a guidepost for future research, but will not prevent protective action being taken by the City. As new scientific data become available, the City will review its decisions and make adjustments when warranted.~~

~~Section 12.29.015—Findings~~

~~A. The Precautionary Principle mandates full disclosure by manufacturers, suppliers, contractors and service providers so the most protective health-based standard can be applied in the comparison of potential alternatives. Only the full disclosure of ingredients and impacts of the products and services will allow the City to make informed and protective decisions.~~

~~B. The alternatives assessment is a public process because, locally or internationally, the public bears the ecological and health consequences of environmental decisions. A government's course of action is necessarily enriched by broadly based public participation when a full range of alternatives is considered based on input from diverse individuals and groups. The public should be able to assist in determining the range of specific reasonable alternatives to be examined. For each alternative the decision-makers and the public should consider both immediate and long-term consequences, as well as possible impacts to the local economy. This form of open decision-making is in line with the Sunshine Act, which allows citizens to have full view of the legislative process. One of the goals of the Precautionary Principle is to include citizens as partners in decisions affecting their environment; and~~

~~C. The Precautionary Principle provides a means to help Berkeley attain its goals as it evaluates future laws and policies in such areas as transportation, construction, land use, planning, water, energy, health care, recreation, purchasing, and public expenditure, among others.~~

~~D. The City of Berkeley wishes to exercise its power to make economic decisions~~

involving its own funds as a participant in the marketplace and to conduct its own business as a municipal corporation to ensure that purchases and expenditures of public money are made in a manner consistent with its policies. Purchases made by the City of Berkeley, especially in conjunction with other jurisdictions and organizations, that are consistent with the Precautionary Principle will encourage market development of new, environmentally preferable, technologies and will demonstrate the efficacy of this approach to other government agencies, residents and businesses.

Section 12.29.017 ~~Precautionary Principle Program Goals~~

~~A. The environmental health goals of the City of Berkeley include, but are not limited to, the following:~~

- ~~! Minimizing health risks to City staff and residents;~~
- ~~! Minimizing the city's contribution to global climate change;~~
- ~~! Improving air quality;~~
- ~~! Protecting the quality of ground and surface waters;~~
- ~~! Minimizing the city's consumption of resources; and~~

12.29.030 Application of Precautionary Principle by City in Existing Policies.

The City shall continue to abide by the following policies, which were previously adopted by the City Council and implemented by the City embodying the Precautionary Principle:

- a. Environmentally Preferable Purchasing Policy.** (Resolution No. 62,693-N.S., 2004)

Requiring the purchase of, and providing specifications for, products or services that reduce waste and toxics, prevent pollution, contain recycled content, save energy and water, follow green building practices, employ sustainable landscape management techniques, conserve forests, and encourage agricultural bio-based products to be implemented in a phased manner beginning with, but not limited to, janitorial products used by the City.

- b. Non-Polystyrene Foam Food Packaging.** (Resolution No. 62,693-N.S., 2004 and BMC Section 11.60.090) Prohibiting City purchase of polystyrene foam food packaging and from utilizing such packaging at any City-sponsored event. At least fifty percent by volume of the food packaging, which the City, or any City-sponsored event, utilizes shall be recyclable or degradable.

- c. Pentachlorophenol, Arsenic And Creosote Treated Wood.** (Resolution No. 62,693-N.S., 2004 and Resolution No. 61,724 -N.S., 2002). Prohibiting the

purchase of all pentachlorophenol, arsenic, and creosote treated wood by the City of Berkeley.

- d. Redwood Products.** (Resolution No. 62,693 -N.S., 2004 and Resolution No. 58,704- N.S., 1996). Prohibiting the purchase of virgin redwood products and allows only the purchase of previously used or certified sustainably harvested redwood for City projects.
- e. Tropical Hardwood.** (Resolution No. 62,693-N.S., 2004 and Resolution No. 58,291- N.S., 1995) Prohibiting the purchase or use of tropical hardwoods and products.
- f. Eliminate Anthropogenic Sources of Dioxin Pollution.** (Resolution No. 62,693 -N.S., 2004 and Resolution No. 60,196-N.S., 1999). Directing the City to adopt a purchasing practice to increase dependence on alternatives such as chlorine-free paper and PVC-free plastics, among other actions.
- h. Green Building.** (Resolution No. 62,693 -N.S. , 2004 and Resolution No. 62,284-N.S., 2003). Requiring the use of the US Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System Standards for City owned and operated projects.
- I. Integrated Pest Management Policy.** (Resolution No. 62,693 -N.S., 2004 and Resolution No. 54,319-N.S., 1988). Requiring use of Integrated Pest Management principles for pest control and pesticide use by the City.
- j. Purchasing Recycled and Recyclable Paper** (Resolution No. 62,693 BN.S., 2004 and Resolution No. 55,327- N.S., 1990). Stating the City's purchasing preference for recycled content paper.
- k. City Administrative Policy Regarding Mercury.** Requiring the City to purchase fluorescent lamps with low mercury content for fluorescent fixtures.

12.29.040 Application of Precautionary Principle by City in Future Policies

The City shall continue to implement the Precautionary Principle in additional areas as the City Manager determines are feasible.

12.29.050 Bi-Annual Report on Implementing Actions.

Bi-Annually the City Manager shall submit a report to the City Council describing the actions required by Section 12.29.030 and Section 12.29.040 to implement the Precautionary Principle.

12.29.060 Precautionary Principle Limited to Promotion of General Welfare.

~~Section 12.29.020 – Precautionary Principle Program Elements~~

~~A. Officers, boards, commissions, and departments of the City and County shall implement the Precautionary Principle in conducting City affairs, beginning with Environmentally Preferable Purchasing Policy including implementation for janitorial products~~

~~B. City employees and officials are encouraged to take the precautionary principle into consideration and evaluate alternatives when taking actions that could impact health and the environment, especially where those actions could pose threats of serious harm or irreversible damage. The precautionary principle does not impose specific duties upon any City employee or official to take specific actions. In undertaking the enforcement of this ordinance, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury nor may this ordinance provide any basis for any other judicial relief including, but not limited to a writ of mandamus or an injunction.~~

In undertaking the enforcement of this Chapter, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury nor may this Chapter provide any basis for any other judicial relief including, but not limited to a writ of mandamus or an injunction.

12.29.070 Severability.

If any section, subsection, sentence, clause, or phrase of this chapter is for any reason declared unconstitutional, invalid, or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or the effectiveness of the remaining portions of this chapter or any part thereof. The City Council hereby declares that it would have adopted this chapter notwithstanding the unconstitutionality, invalidity, or ineffectiveness of any one or more of its sections, subsections, sentences, clauses, or phrases.

Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the glass case located near the walkway in front of Old City Hall, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch

of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF MILL VALLEY ADDING CHAPTER 14.40 TO THE MILL VALLEY MUNICIPAL CODE PERTAINING TO THE REDUCTION OF AIR POLLUTION BY REGULATING THE INSTALLATION OF WOOD-BURNING APPLIANCES AND THE REMOVAL AND OPERATION OF NON-CERTIFIED WOOD BURNING APPLIANCES

THE CITY COUNCIL OF THE CITY OF MILL VALLEY DOES ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS

The City Council finds:

A. The California State Air Resources Board (ARB) adopted a particulate matter (PM10) Ambient Air Quality Standard (AAQS) in December 1982, and levels for the PM10 AAQS were selected pursuant to California Code of Regulations Title 17 Section 70200 to protect the health of people who are sensitive to exposure to fine particles.

B. Research indicates that wood smoke is a significant contributor to particulate matter levels that pose significant health risks. The U.S. EPA indicates that wood smoke contains harmful chemical substances such as carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOCs), dioxin, and inhalable particulate matter (PM). Some of the VOCs are irritating, toxic, and/or cancer causing.

C. The City Council desires to lessen this risk to human health and the environment caused by air pollution from wood burning appliances.

D. A need exists to adopt regulations that apply to wood burning combustion emissions.

E. The regulations established by this ordinance will minimize the increase in particulate emissions from future installation of certain wood-burning appliances, and will decrease particulate emissions by the removal of certain wood-burning appliances at the time of remodel. The ordinance further provides for removal of certain wood burning appliances.

SECTION 2. PURPOSE & INTENT

The purpose of this ordinance is to improve air quality in the City of Mill Valley by reducing emissions of smoke (particulate matter), organic gases and carbon monoxide by regulating the type of wood-burning appliances that may be installed and maintained within the City and by banning the use of non-certified wood heaters after December 31, 2008.

SECTION 3. Chapter 14.40 is added to Title 14 of the Mill Valley Municipal Code to read as follows:

CHAPTER 14.40 WOOD BURNING APPLIANCES

14.40.010 Title. This Chapter shall be known as the Wood Smoke Ordinance.

14.40.020 Purpose & Intent. The purpose of this ordinance is to improve air quality in the City of Mill Valley by reducing emissions of smoke (particulate matter), organic gases and carbon monoxide by regulating the type of wood-burning appliances that may be installed and maintained within the City and by banning the use of non-certified wood heaters after December 31, 2008.

14.40.030 Definitions

A. "Bay Area Air Quality Management District" means the air quality agency for the San Francisco Bay Area established pursuant to California Health and Safety Code Section 40200.

B. "EPA" means the United States Environmental Protection Agency

C. "EPA Certified Wood Heater" means any wood heater that meets the standard in Code of Federal Regulations Title 40, Part 60, Subpart AAA, in effect at the time of installation and is certified and labeled pursuant to those regulations. An EPA certified wood heater may be freestanding, built-in, or an insert within a fireplace.

D. "Fireplace" means any permanently installed masonry or factory-built wood-burning appliance designed to be used with an air-to- fuel ratio greater than or equal to 35 to 1.

E. "Garbage" means all solid, semi-solid and liquid wastes generated from residential, commercial and industrial sources, including trash, refuse, rubbish, industrial wastes, asphalted products, manure, vegetable or animal solids, and semi solid wastes and other discarded solid and semi-solid wastes.

F. "Gas Fireplace" means any masonry or factory-built fireplace in which a device that has been designed to burn natural gas or liquefied petroleum gas in a manner that simulates the appearance of burning wood has been permanently installed so the burner pan and associated equipment are affixed to the masonry or metal base of the fireplace.

G. "Insert" means any wood heater designed to be installed in an existing masonry or factory-built fireplace.

H. "Paints" are all exterior and interior house and trim paints, enamels, varnishes, lacquers, stains, primers, sealers, under-coatings, roof coatings, wood preservatives, shellacs, and other paints or paint-like products.

I. "Paint Solvents" means all original solvents sold or used to thin paints or clean up painting equipment.

J. "Pellet-Fueled Heater" means any appliance that operates exclusively on solid fuel pellets.

K. "Solid Fuel" means wood or any other non-gases or non- liquid fuel.

L. "Treated Wood" means wood of any species that has been chemically impregnated, painted or similarly modified to improve resistance to insects or decay.

M. "Waste Petroleum Product" means any petroleum product other than fuels that has been refined from crude oil, and has been used or has been contaminated with physical or chemical impurities.

N. "Wood-Burning Appliance" means a fireplace, wood heater, or pellet-fired heater or similar device burning solid fuel used for aesthetic or space-heating purposes.

O. "Wood Heater" means an enclosed, wood-burning appliance that is not a fireplace capable of and intended for space heating that meets all the following criteria:

1. An air-to- fuel ratio in the combustion chamber averaging less than 35-to- 1 as determined by the test procedures prescribed and approved by the Building Official.

2. A usable firebox volume less than 20 cubic feet (0.57 cubic meters).
3. A minimum burn rate less than 11 lb/hr (kg/hr).
4. A maximum weight of less than 1,760 lbs (800kg). For the purpose of this ordinance, fixtures and devices that are normally sold separately, such as flue pipe, chimney and masonry components that are not an integral part of the appliance or heat distribution ducting do not count as part of the appliance weight.

14.40.040 General Requirements. It shall be unlawful in the City of Mill Valley to:

A. Use any wood-burning appliance when the Bay Area Air Quality Management District issues a "Spare the Air Tonight" warning and when an alternate legally permitted heat source is available.

B. Install a wood-burning appliance that is not one of the following: (1) a pellet-fueled wood heater, (2) an EPA certified wood heater, or, (3) a fireplace certified by the EPA if the EPA adopts a fireplace certification program. The conversion of a gas fireplace to burn wood shall constitute the installation of a wood-burning appliance and shall be subject to the requirements of this ordinance.

C. Use any of the following prohibited fuels in a wood-burning appliance: garbage, paint solvents, treated wood, coal, plastic products, glossy or colored papers, rubber products, particle board, waste petroleum products, salt water driftwood, paints, wood having a moisture content higher than 20%, or any other material that produces noxious or toxic emissions when burned in a wood-burning appliance.

D. Use any non EPA Phase II-certified wood heaters, or EPA Phase II-certified wood heaters that have been installed without a building permit, after December 31, 2008. After that date, all noncompliant wood stoves and inserts must be removed or rendered inoperable. The Building Official may grant an exception to this section in the case of hardship. Examples of hardships include without limitation the following: the prohibited wood heater is a residential sole source of heat or there is no adequate alternative source of heat that can be provided at a reasonable cost to the premises.

14.40.050 Removal Of Wood Burning Appliance Upon Remodel. A non-EPA Phase II-Certified wood-burning appliance shall be removed, rendered inoperable or replaced with a compliant appliance when:

- A. A remodel or addition exceeds 500 square feet;
- B. The combination of the addition, alteration or remodeling exceeds 50% of the floor area of the existing structure; or
- C. A renovation includes opening up walls immediately adjacent to the appliance.

14.40.060 Permit Requirements For Installation And Replacement Of Wood Burning Appliances. A building permit is required for the replacement or installation of any wood-burning appliance.

14.40.070 Violations - Penalties.

- A. Violations of this Ordinance shall be punishable as misdemeanors or infractions, at the

discretion of the City's designated code enforcement official following consideration of the severity of the violation. Penalties shall not exceed the amounts set forth in Government Code Sections 36900 and 36901.

B. Each violation of this Ordinance is a separate offense for every day such violation shall continue, and the penalties imposed by this section shall be imposed on each and every separate offense.

C. Nothing in this section limits the power of the City to use all other legal or equitable remedies to redress, abate, or punish any violation of the provisions of this Ordinance.

SECTION 4. CEQA

This ordinance is categorically exempt from the California Environmental Quality Act provisions under California Code of Regulations, Title 14, Chapter 3, Section 15308 as an action by a regulatory agency for the protection of the environment.

SECTION 5. SEVERABILITY

If any article, section, subsection, subdivision, paragraph, sentence, clause, phrase, or word of this ordinance is for any reason held to be unconstitutional or invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance or any part thereof. The City Council of the City of Mill Valley hereby declares that it would have adopted each article, section, and sentence thereof, irrespective of the fact that any one or more of said provision be declared unconstitutional or invalid.

SECTION 6. EFFECTIVE DATE. This ordinance shall take effect on January 1, 2006, and shall apply to all permits applied for and issued on or after that date, and shall be published once within fifteen (15) days after adoption in the Mill Valley Herald, a newspaper of general circulation in the City of Mill Valley.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Mill Valley, State of California, held this ____ day of _____, 2005 by the following vote:

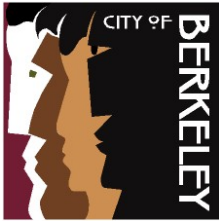
AYES:
NOES:
ABSENT:

Mayor

ATTEST:

City

Clerk



Planning and Development Department
Toxics Management Division

ACTION CALENDAR

March xx, 2006

To: Honorable Mayor and
Members of the City Council

From: Community Environmental Advisory Commission

Subject: Adopt Ordinance of Wood Smoke Nuisance Conditions

RECOMMENDATION

That City Council adopt the first reading of the attached ordinance to declare wood smoke under certain conditions, a nuisance.

FISCAL IMPACTS OF RECOMMENDATION

None.

CURRENT SITUATION AND ITS EFFECTS

There is no existing municipal methodology available to evaluate when wood smoke creates an adverse health hazard in a local region near its source. Moreover, there is no manner in which an injured party can take legal action against a neighbor who is generating excessive wood smoke.

Some communities have banned aspects of wood burning, and Berkeley was the first City to ban new open-hearth fireplaces in its Building Code. Some communities like Sebastopol, have banned the burning of some materials such as plastic and magazines. Some communities have banned burning in bad air quality days indentified as “Spare the Air Days”. [Ask LA for reference] No municipality has created a tool to identify a local adverse smoke condition for purposes of finding resolution under the law.

BACKGROUND

The combustion of wood in wood fireplaces and stoves produces fine particulate matter (PM) which is released as wood smoke. The potential health impacts from exposure to PM air pollution are significant. Health effects associated with PM exposure include: premature mortality, increased hospital admissions for cardiopulmonary causes, acute and chronic bronchitis, asthma attacks and emergency room visits, respiratory symptoms, and days with some restriction in activity. These adverse health effects have been reported primarily in infants, children, the elderly, and those with preexisting cardiopulmonary disease.

There are both federal and state air quality standards for particulate matter. For particulate matter that is less than 2.5 microns in size (PM_{2.5}) the federal and annual average arithmetic means are respectively 15 and 12 $\mu\text{g}/\text{m}^3$. The federal EPA also limits the 24 hour average PM₁₀ to 65 $\mu\text{g}/\text{m}^3$. The state OEHHA (Nabil: what does OEHHA stand for?) has recommended a limit of 25 $\mu\text{g}/\text{m}^3$ for a 24 average PM_{2.5} level, but this has not yet become law. The Bay Area Air Quality Management

District (BAAQMD) does not measure PM_{2.5} at most of its air quality monitoring sites, but it does monitor PM₁₀. PM₁₀ is particulate matter that is less than 10 microns in size, and thus includes the PM_{2.5} material. The federal and state standards for PM₁₀ are respectively 50 and 20 µg/m³ for the annual arithmetic mean, and 150 and 50 µg/m³ for the 24 hour average. **[Values are current to 5/6/05 - Get the ARB website reference for these values]**

Woodsmoke is primarily PM_{2.5}, so it is covered under the PM₁₀ and PM_{2.5} air quality standards. In areas where PM₁₀ exceeds the air quality standards there have been ordinances which prohibit wood burning. **[LA – I believe you had some examples of this]** PM₁₀ levels measured at BAAQMD monitoring stations in the Bay Area were 40-50% of the state 24 hour standard and appears in some cases to have exceeded the annual average standard (July 2001 to June 2002). Woodsmoke is thought to be a significant component of the particulate pollution in the Bay Area, and in 1992, the BAAQMD developed a model wood-burning ordinance, which it distributed to local jurisdictions for adoption. The model ordinance banned open-hearth fireplaces **[Nabil – was this just in new construction?]**. In January 1999, the Berkeley City Council considered this model ordinance and referred the ordinance to staff and various commissions, including the CEAC. Various communities have adopted ordinances broadly based on the BAAQMD model ordinance including Petaluma, San Jose, Los Gatos, Palo Alto, San Mateo and others. On December 19, 2000, the CEAC adopted the recommendations to ban new construction of open-hearth fireplaces and also to require mitigation devices for commercial wood burning devices.

The current ordinances reduce the regional annual average particulate concentrations. However woodsmoke is both intermittent and local. The current ordinances are not protective for the immediate neighbors of the source. To this end, the CEAC has used existing plume modeling and state guidelines for acceptable concentrations of particulates in the air to provide a simple and reasonably conservative parameters that identify conditions that will likely lead to an adverse health impact. When such conditions are met, a nuisance condition is said to exist and this can be used to seek remedy to the adverse condition.

SPECIFYING NUISANCE CONDITIONS

Assumptions made by CEAC to determine nuisance conditions for smoke:

- a. The CEAC used the EPA's Screen3 model for air dispersion.
- b. To be protective of health, PM must at least meet current air quality standards. The CEAC assumed that the wood burning appliance is used intermittantly. The controlling air quality standard is therefore the 24 hour average level. As of March 2006, the limiting 24 hour standard is the State of California 24-hour average standard of particulates less than 10 micron in diameter, which is 50 µg/m³.
- c. The CEAC assumed that a conservative time for wood fire to burining is 2 hours in a day.
- d. Average conservative daily PM₁₀ concentrations in ambient air for the Berkeley area assumed to be 20 µg/m³ based on the concentrations measured by BAAQMD in Richmond and Fremont..
- e. Pls add other assumptions such as type of burn and wood. **[to be added]**
- f. Indoor air quality is not significantly less than outdoor air quality.

With these parameters, Attachment A shows the particulate dispersion modeling for a chimney at various heights with distance. **[The following values are preliminary and have not been reviewed]**

The graphs in Attachment A also show that an average chimney is topped at 6.5 meters (19 feet). The

smoke will dissipate vertically and laterally away from the chimney top.

Attachment A shows that at 60 meters, the particulate concentration will fall to less than 60 ug/m³. At 60 meters downwind, the value of PM₁₀ falls to less than 60 ug/m³. Starting with a 2 hour conservative exposure and an ambient air concentration of PM₁₀ at 20 ug/m³; the resultant exposure will average to 50 ug/m³ or less.

Attachment A also shows that dispersion acting vertically reduces the smoke concentrations significantly at 2 meters below the chimney top.

Thus, a safe distance from a chimney generating a typical smoke plume is 60 meters downwind and over 2 meters below the chimney.

The CEAC provided this analysis to BAAQMD and others for review. Most opinions are xxx

Hence the definition of nuisance condition for smoke is said to exist if a smoking chimney has a neighboring window whose top is measured at 2 meters (9 feet) or less below the source of smoke and is within 60 meters (200) feet lateral distance from the chimney.

If a nuisance condition is proven, and accommodation is reached between the conflicted parties, this ordinance requires arbitration. If arbitration does not lead to a written agreement to accommodate the injured party, then it should be settled in court.

ALTERNATIVE ACTIONS CONSIDERED

CITY MANAGER

The City Manager concurs with the content and recommendations of the Commission's Report.

CONTACT PERSON

L.A. Wood, CEAC, (510) 642 2489

Robert Clear, PhD, Vice Chair CEAC, (510) 843 1868

DRAFT CEAC RECOMMENDATION: Regarding LBNL's Deed Restriction request That City Council direct the City Manager to write a letter to the University of California Office of President Dynes asking him to deny Lawrence Berkeley National Laboratory's (LBNL) request for deed restrictions on the use of groundwater at LBNL and further that LBNL/DOE be required to clean up the groundwater to drinking water standard.

BACKGROUND

After many years of site investigation and little remedial action LBNL/DOE have now decided to leave most of the contamination in place in soils and groundwater. To enable the Laboratory to do this, LBNL will have to obtain deed restrictions from University of California Office of President. UC property is state land and the Department of Energy has used the land to conduct research and in the process industrial solvents, petroleum fuels, PCBs, radioactive substances/chemicals have been dumped into soils and the creeks.

Members of the Berkeley City Council, city commissions, environmental and neighborhood organizations, and creek groups have spent over a decade working with state and federal regulatory agencies to address the serious problems of environmental contamination at LBNL, insisting on a comprehensive cleanup of radioactive and hazardous chemical waste from the soil, groundwater, surface waters, and vegetation in the Strawberry Creek Watershed.

Deed restrictions are the last resort for a clean up and are more clearly associated with Brownfields than they are with a successful clean-up. Brownfields should only be a last resort in a depressed area where the contamination will not be cleaned up due to the absence of a responsible party and/or general economic depression. Berkeley is not depressed economically nor is the federal government. Moreover, LBNL/DOE does not require either the use of deed restrictions or Brownfields.

Preservation of the groundwaters of the State of California must be of the highest priority. The Berkeley City Council and its environmental commission support full environmental restoration at LBNL so as to preserve the Berkeley/Oakland hills groundwater for future generations. This is mandatory because in an emergency Berkeley groundwater will be used for domestic, municipal, irrigation and industrial purposes.

City policy, like that of the state water codes (Porter Cologne Act) contains a significant principle that resources that are deemed to have existing and potential groundwater beneficial uses should be preserved. Similarly, the state water board has a non-degradation policy. This means that the first consideration for any site clean-up is that it should be brought back to the pristine condition in which it was found.

Leaving contamination in place may be a short-term cost saving measure for the laboratory, but the savings to the LBNL/DOE are a cost to the citizens of California and especially to the citizens of Berkeley. This is particularly important since the University of California is the landlord and they will have to accept, in perpetuity, any contamination that has been caused by the DOE.