APPELLANT'S APPEAL BRIEF

(Re: 2620 Laguna St.; DPW site permit 17WR-0252)

Honorable BOA President Swig, Vice-President Lazarus, and Commissioners Honda, Tanner, and Santacana:

Introduction.

Appellant respectfully requests that the BOA grant this Appeal of DPW site permit 17WR-0252 on unprecedented legal and moral grounds hereafter explained. Such a BOA permit reversal decision can lead San Francisco and our nation in protecting our citizens and precious environment against further imprudent use of dangerous wireless technologies, which seriously or irreversibly threaten people and nature.

Unprecedented BOA Appeal Issues Raised.

Until now, this Board has rejected all health protests of wireless cell towers on alleged grounds that they are preempted by Public Works Act Article 25, and restrictive 1996 Federal legislation and FCC guidelines. This is the first cell tower site permit appeal, on health and safety grounds which contends that this Board is not merely permitted but required by San Francisco's "precautionary principle" ordinance [Environmental Code 100-101, **EXHIBIT A**] to grant the appeal; that highly credible independent worldwide scientific studies since 1996 now outdate and invalidate 1996 FCC guidelines, and overwhelmingly reveal that existing and planned wireless microwave technologies seriously or irreversibly threaten not just San Franciscans, but people and nature everywhere.

Because the "precautionary principle" ordinance *governs "all officers, boards, commissions, and departments of the City and County of San Francisco"* it not only applies to flawed Article 25 agency procedures (hereafter described), it also applies to this Board's decision-making process.

Appellant respectfully contends that based on now known serious dangers of wireless microwave technologies, this Board is obliged by the "precautionary principle" ordinance to resolve any remaining environmental risk doubts in favor of protecting health and safety of San Franciscans, because:

"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 . . . prevent the degradation of the environment or protect the health of its citizens." "There is a duty . . . to prevent harm."

Burden of Proof is on Corporate Proponents, Not on Vulnerable Citizens.

On June 26, 2019 this Board officially asked for a Health Department environmental review and update of a 2010 report regarding *"the health effects and regulation of wireless communication networks"*. This appeal responds to President Swig's conscientious concerns which prompted the health risk update request, with the assertion that BOA is not only permitted but obliged by the SF "precautionary principle" ordinance to resolve any remaining health doubts in favor of protecting health and safety of San Franciscans, rather than "rubber stamping" DPW Article 25 permit decisions. Thus, instead of foisting the burden of proving health risk dangers on vulnerable protesting citizens, the SF "precautionary principle" ordinance requires that the burden of proving safety of discretionary microwave projects be placed on the corporate proponents of those projects, like Verizon, viz:

"The burden to supply this information lies with the proponent, not with the general public."

Factual background re 2620 Laguna Street 7,000 Watt Cell Tower Health Dangers.

Whereas most San Francisco wireless site permit appeals involve less obtrusive 110-220 watt street light antenna installations, this is an appeal of a site permit for construction of an unsightly 7,000 watt, 60 foot Verizon 4G cell tower atop a PG&E power pole at 2620 Laguna Street, a Tier B zoning protected location on an "excellent view" street – only twelve feet away from an 82 unit high-rise view condominium building at 1998 Broadway, and directly across the street from 2000 Broadway, a 200-unit rental apartment building in an extremely high-density residential area with many young children, pregnant women, elderly people and others diagnosed with debilitating chronic diseases.

For many years – and long before introduction of current experimental 5G technologies – 3G and 4G cell towers have been scientifically studied and identified as epicenters of significant cancer and other disease

clusters. For example, a meticulous university study of people living within 350 meters (1150 feet) of an 850 MHz, 1500 watt 1996 cell phone tower in Netanya, Israel experienced significant cancer increases (re carcinomas of the breast, ovary, lung, kidney, bone, and Hodgkin's disease). (Published in the International Journal of Cancer Prevention https://medcraveonline.com/JCPCR/ and elsewhere online,.
Also, many more cell tower cancer cluster studies are listed and linked elsewhere online.

Of particular local interest are recently reported facts concerning a Ripon, CA school campus cancer cluster. [E.g. see 3/13/19 Newsweek article at https://www.newsweek.com/can-cell-phone-tower-cause-cancer-children-1362314 and 3/28/19 Modesto Bee article titled: "Sprint turns off Ripon CA cell tower amid cancer concerns" https://www.modbee.com/news/article228538324.html.]

After 4 students and 3 teachers and 2 nearby preschool children were diagnosed with cancer within a 3-year period, Sprint disconnected and agreed to relocate an allegedly safe 4G school cell tower. Previously, after Sprint's engineering firm had confirmed the alleged safety of the cell tower as being well within FCC guidelines, concerned parents hired an independent expert.

According to Newsweek, "A group of parents were unconvinced by the district's reassurances and hired Eric Windheim, an electromagnetic radiation specialist. *"I wouldn't send my kids there at all, it absolutely is dangerous,"* Windheim said in an interview with CBS Sacramento*. "Children are still developing and their cells are still being divided. It's the worst possible time in their life to be exposed."*

FCC and Industry Safety Misrepresentations.

Despite thousands of unbiased worldwide scientific studies confirming dangers of existing wireless cell tower technologies, the 'revolving door' FCC disingenuously persists in claiming complete safety of cell towers and WIFI technologies, by citing only biased industry-friendly sources. But compelling credible and independent evidence now *overwhelmingly refutes* these false and biased claims.

Contrary to FCC and wireless industry false and misleading safety contentions, this wireless technology is so dangerous that WIFI product liability claims are commercially uninsurable – even by Lloyds of London. (e.g. see https://www.thenation.com/article/how-big-wireless-made-us-thinkthat-cell-phones-)

Yet, while knowingly misleading users about alleged safety of wireless products, WIFI industry annual SEC corporate disclosures to their shareholders tell a different story. For example, see UNITED STATES SECURITIES AND EXCHANGE COMMISSION FORM 10K VERIZON COMMUNICATIONS INC. ANNUAL REPORT, fiscal year ended December 31, 2014: *"We are subject to a significant amount of litigation, which could require us to pay significant damages or settlements."… "Our wireless business also faces personal injury and consumer class action lawsuits relating to alleged health effects of wireless phones or radio frequency transmitters, and class action lawsuits that challenge marketing practices and disclosures relating to alleged adverse health effects of handheld wireless phones. We may incur significant expenses in defending these lawsuits. In addition, we may be required to pay significant awards or settlements."*

Thus industry disclosures to shareholders corroborate unbiased and independent health risk studies. And they support Appellant's assertion that a pulsating 24 hour 7,000 watt 4G-cell tower at 2620 Laguna Street can seriously or permanently jeopardize health of those in its proximity, especially children.

Factual background of flawed city agency approval process re 2620 Laguna Street.

Private DPW Article 25 pre-notice processes.

San Francisco's "precautionary principle" ordinance [Environmental Code 100-101, EXHIBIT A] requires *"public participation and an open and transparent decision making process [with] complete and accurate information on potential human health and environmental impacts" in decisions affecting our environment. The "burden to supply this information … lies with the proponent, not with the general public."*

Yet, for about 18 months from September 2017 until February, 2019 the Public Works, Planning and Health Departments privately and collegially communicated with Verizon lawyers and engineers, about approving a 7,000 watt, 60 foot Verizon 4G cell tower atop an unsightly wooden power pole at 2620 Laguna

Street, *with absolutely no public knowledge, notice, or participation*. Moreover, during that same period they were also *privately* evaluating other proposed Verizon wireless antenna projects in the same area. Never during that 18-month period or thereafter was there ever any city agency public disclosure of potential human health or environmental dangers associated with these cell tower projects. Nor were such antenna radiation dangers, either alone or in combination with numerous other antennae installed in the area, ever properly or fully addressed by the Article 25 City agencies.

Moreover, interior microwave emitters within properties adjoining these projects were never evaluated. So in approving the alleged safety of permit 17WR-0252 the DPH merely accepted data from biased Verizon engineers which completely omitted consideration of RF emitters within adjoining properties, like 24 hour Comcast Wi-Fi and 82 PG&E "smart meters" in clustered banks inside 1998 Broadway. Furthermore, on determining existence of potentially conflicting wireless antenna permits in the same vicinity DPW did not intervene to protect potentially vulnerable citizens by resolving such conflicts; instead DPW left it to the few corporate permitees to privately resolve conflicts amongst themselves. Such an exception was applied to a street light antenna permit at 1940 Broadway (May 28, 2019, Permit 18WR-0104), near and within direct line of sight from 1998 Broadway, which is under appeal on the health grounds that: *"Verizon has 3 proposed antennas within 1/2 of a block of 1940 Broadway. The locations for the proposed antennas are 1940 Broadway, 1960 Vallejo, 2620 Laguna Street. My neighbors and I are very concerned about the long term health effects of having radio frequency coming into our building 24 hours a day from 3 directions."* (See June 10, 2019, Appeal 19-062)

Thus for 18 months owners, neighbors and vulnerable residents of 1998 Broadway's 82 apartments did not participate in and were unaware of private communications between Article 25 city agencies and Verizon lawyers and engineers which resulted in secret antenna permit decisions in their neighborhood which can seriously or irreversibly affect their health and safety, and property rights.

Post-notice public approval process re 2620 Laguna Street.

Only on receiving a February 8, 2019 DPW notice tentatively approving site permit 17WR-0252, did owners and occupants of 1998 Broadway **first learn** of *an already approved proposed cell tower project 12 feet from their 82 apartment building.* Thereafter, (during a twenty-day protest period) fifty concerned 1998 Broadway occupants and owners filed written protests objecting to the cell tower project on numerous and often detailed grounds. [See DPW's latest responses to Appellant's Public Records Request 19-2119] Many of these protestors were highly skilled people with post-graduate degrees in law, engineering, accounting, business, teaching and other professional disciplines. Some like Appellant objected more than once, in both mailed and emailed protests. As a retired attorney Appellant protested several times on various legal grounds, including the "precautionary principle" ordinance, viz.

"I further object on grounds that the proposed personal wireless facility is barred by SF Environment Code sec ## 100 et seq which officially mandates that "All officers, boards, commission, and departments of the City and County shall implement the Precautionary Principle in conducting the City and County's affairs: The Precautionary Principle requires a thorough exploration and a careful analysis of a wide range of alternatives. Based on the best available science. …. 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 . . . prevent the degradation of the environment or protect the health of its citizens."

[See Appellant's Registered Comment #74165 in DPW responses to Public Records Request 19-2119]

After receiving most of the fifty protests, Verizon engineers mailed or emailed letters to many protestors (including an April 8th email to appellant) disingenuously assuring them of cell tower safety under "very strict [FCC] guidelines" which allegedly preempted all local and state regulation and were incorporated in DPW Article 25. Prior to the protest hearing, Appellant strongly disputed Verizon's safety and preemption contentions in a detailed reply letter, which raised all the material grounds of this appeal.

Several weeks after the March expiration of the 2620 Laguna public protest period, the DPW optionally and dilatorily scheduled a public protest hearing for 9 am April 22, 2019 on the Earth Day Monday after Easter Sunday and during the Easter/Passover spring vacation holiday season – an obviously inconvenient date and time. Though no one at 1998 Broadway wanted the cell tower and fifty people had filed protests, only very few could attend the protest hearing. Appellant could not attend because of age and accident related physical limitations.

The Hearing Officer was a young engineer without legal expertise required to adjudge the many complicated written protest issues. There were no unbiased independent legal or environmental experts present to advise the Hearing Officer or to answer audience questions. The only experts at the hearing were Verizon attorneys and engineers and relevant City employees. In addressing the Hearing Officer and in answering audience questions they all affirmed that under Article 25 local regulation of health and safety, view obstruction, and property value impairment were preempted by 1996 Federal laws and regulations. And they reiterated alleged safety of the proposed 7,000-watt cell tower as compliant with 'strict FCC guidelines'. Verizon's lawyer explained that though its present SF wireless permits are for a 4G network, beginning early next year Verizon intends starting a 5G San Francisco network.

Three days after the April 22nd Earth Day protest hearing, in an April 25, 2019 recommendation to the Director, the Hearing Officer cursorily dismissed all protests, and recommended Director's approval of Verizon permit 17WR-0252. Without specific reference to the many mailed and emailed protests, including Appellant's citations to the "precautionary principle" ordinance and T-Mobile case, she said:

"Protestors were concerned with health effects, noise, blockage of views, in a residential neighborhood versus commercial area, effects on property values, and misleading information in application package on size of antenna. ***Application meets all City Ordinances****. Information on application package was not misleading. Recommend approving."*

A week later, on May 2, 2019, DPW Director Nur privately and with DPW management witnesses certified his written approval of permit 17WR-0252 at 2620 Laguna Street. Although Article 15, section 1514 mandates DPW's *"prompt"* public Notice of Final Determination, public notice of the Director's certified approval decision was arbitrarily delayed for *six weeks* until June 12, 2019. [See DPW's latest responses to Appellant's Public Records Request 19-2119] On that date Appellant sent to the Executive Assistant to the DPW Director, a further legal protest that: *"Fundamental state and federal constitutional protections preclude uncompensated taking or deprivation of property or human rights without due process of law. Yet, protesters of order 184,504 were precluded from questioning or participating in any ex-parte deliberations purportedly justifying issuance of that order obviously adverse to their interests and property rights."*

Appeal Grounds.

Thereafter, on June 26, 2019, Appellant filed this appeal on grounds that the Article 25 wireless permit process implemented by Public Works, Health and Planning Departments:

1. Violated San Francisco's "precautionary principle" ordinance which requires that all SF officers, boards, commissions and departments apply the "precautionary principle" to protect against serious threats to people and nature, notwithstanding lack of scientific certainty about cause and effect; and

2. Failed to follow the unanimous California Supreme Court decision in T-Mobile West vs. San Francisco, S238001 upholding local regulation of "lines or equipment" on public rights of way that "might cause negative health consequences, or create safety concerns"; and that

3. The Department of Public Health incorrectly determined that the Verizon Application complied with the Public Health Compliance Standard; and that

4. The Planning Department incorrectly determined that the Verizon Application met the applicable Article 25 Compatibility Standard.

Reasons For Granting Appeal.

A. In approving Verizon Permit 17WR-0252 the Public Works, Health and Planning Departments violated the clear language and obvious intent of San Francisco's "precautionary principle" ordinance [Environmental Code 100-101] because:

1. They disregarded the most fundamental "precautionary principle" that *"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 . . . prevent the degradation of the environment or protect the health of its citizens."*

2. They never notified concerned San Franciscans about possible serious human health risks overwhelmingly revealed by current science and technology, and consistently failed to prioritize protection of human health and safety.

3. They excluded any citizen participation or notification from their private decision-making processes for approval of Verizon's cell tower applications.

4. They failed to place the burden of proving cell tower safety on corporate proponents (including Verizon), yet invariably privately decided to permit the wireless projects; they have thereby foisted upon vulnerable citizens the unfair burden of challenging such private safety decisions.

5. They failed to consider independent expert opinions and concerns about serious health and safety risks of proposed Verizon cell towers, while they imprudently accepted questionable data and opinions from obviously biased Verizon engineers and lawyers.

6. They have failed to examine alternatives with the least potential impact on human health and the environment, such as fiber optics, which can now afford Bay Area residents the fastest Internet connections in the entire USA. (See PC Magazine, June 26, 2019, "The Fastest ISPs of 2019" https://www.pcmag.com/article/369142/the-fastest-isps-of-2019)

7. Their required Article 25 approval notices were difficult to decipher "boilerplate" documents, *without any prominent and simple health warnings*; they thereby discouraged, rather than encouraged, belated citizen involvement, protests or appeals of agency approvals already privately made without required citizen participation about health and safety risks, or less dangerous alternatives.

8. They unfairly scheduled the public protest hearing for Verizon application 17WR-0252 on an obviously inconvenient date during the Easter/Passover holiday, at 9 am Monday (after Easter Sunday), when almost none of the fifty 1998 Broadway protesters could attend.

9. They unfairly arranged for the protest hearing by assigning as Hearing Officer a young engineer without expertise required to understand and adjudge the many complicated written legal and other protest issues; and they failed to assure presence at the hearing of independent legal or environmental experts to advise the Hearing Officer, or to answer audience questions.

10. During both Article 25 protest hearings and BOA wireless permit appeal hearings, they have opposed any local consideration of cell tower health risks. Rather than acting as "precautionary principle" citizen-advocates they've often become citizen-adversaries.

B. The Public Works, Health and Planning Departments erred and misled the public by failing to follow the unanimous California Supreme Court decision in T-Mobile West vs. San Francisco, S238001, to regulate health and safety risks of wireless antennas on public rights of way.

1. The T-Mobile decision specifically upheld San Francisco's local regulation of *"lines or equipment" on public rights of way that "might cause negative health consequences, or create safety concerns,"* beyond Article 25 limitations.

2. Article 25 agency failures to cite and follow the T-Mobile decision violated their obligations under the "precautionary principle" ordinance to prevent harm from serious threats to people and nature.

3. Article 25 agency failures to cite and follow the T-Mobile decision materially misled the public into believing they had no practical recourse for opposing the Verizon cell tower on health and safety grounds,

and thereby deterred protestors from relentlessly opposing harmful San Francisco wireless site permits and installations on health and safety grounds.

4. The T-Mobile decision was published on April 4, 2019, after DPW's tentative approval of Verizon Permit 17WR-0252. However, it was well known to Article 25 city agencies, but never disclosed or discussed by them during the April 22, 2019 protest hearing or in DPW Director Nur's final approval order. Consequently, except for Appellant, almost all of 1998 Broadway's fifty protestors were materially misled into believing they had no practical recourse for opposing the Verizon cell tower on health and safety grounds.

C. 1996 Federal regulations and statutes never preempted all other legal grounds for regulating San Francisco wireless permits. And Article 25 permitting agencies erred and misled the public by failing to inform them that there are other State and Federal legal grounds for potentially redressing harms from San Francisco wireless site permits and installations.

1. For example, fundamental state and federal constitutional protections preclude uncompensated taking or deprivation of property or human rights without due process of law. However, a full listing of potential legal causes of action for damages or equitable relief from dangerous wireless technologies is beyond the scope of this brief, which relies on San Francisco's "precautionary principle" ordinance, **EXHIBIT A**.

2. Nonetheless, the legal theory of "inverse condemnation" may be of particular importance to the City and County of San Francisco, as wireless companies begin admittedly untested experimental employment of dangerous 5G technologies. Because of the inverse condemnation theory PG&E Corporation has initiated Bankruptcy insolvency proceedings, arising from its inability to pay incalculably immense and unprecedented environmental damages potentially attributable to its operations as a public utility. Thereby, the burden of bearing those damages may be foisted upon California government entities and their taxpayers.

Similarly, San Francisco taxpayers and ratepayers may some day bear completely uninsurable and incalculably immense environmental damage risks which could bankrupt Verizon and other wireless industry

utilities, whose insanely dangerous 5G experimental technologies threaten not just San Franciscans, but people and nature everywhere.

Conclusion.

1. Based on now widely known serious dangers of wireless microwave technologies, this Board is obliged by the "precautionary principle" ordinance to resolve any remaining environmental risk doubts in favor of protecting health and safety of San Franciscans.

2. Article 25 City departments materially violated the clear language and intent of the "precautionary principle" ordinance in granting Verizon site permit 17WR-0520 at 2620 Laguna Street.

3. So a BOA permit reversal decision is not merely permitted, but required by indisputable facts.

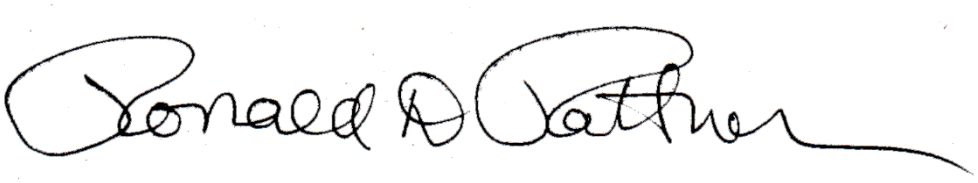
Invocation.

May such a groundbreaking BOA permit reversal decision lead San Francisco and our Nation in protecting our citizens and precious environment against further imprudent use of dangerous wireless technologies, which seriously or irreversibly threaten people and Nature.

WHEREFORE:

Appellant respectfully requests that the BOA grant this Appeal of DPW site permit 17WR-0252 on the unprecedented legal and moral grounds heretofore explained.

Respectfully submitted,



Ron Rattner, JD

Appellant and Retired San Francisco Attorney

EXHIBIT A

San Francisco Precautionary Principle Ordinance

http://www.rachel.org/files/document/San_Francisco_Precautionary_Principle_Ordinanc.pdf

SF Precautionary Principle Ordinance

Chapter 1 Precautionary Principle Policy Statement Sec. 100. FINDINGS.
The Board of Supervisors finds and declares that:

A. Every San Franciscan has an equal right to a healthy and safe 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. The duty to enhance, protect and preserve San Francisco's environment rests on the shoulders of government, residents, citizen groups and businesses alike.

B. Historically, environmentally harmful activities have only been stopped after they have manifested extreme environmental degradation or exposed people to harm. In the case of DDT, lead, and asbestos, for instance, regulatory action took place only after disaster had struck. The delay between first knowledge of harm and appropriate action to deal with it can be measured in human lives cut short.

C. San Francisco is a leader in making choices based on the least environmentally harmful alternatives, thereby challenging traditional assumptions about risk management. Numerous City ordinances including: the Integrated Pest Management Ordinance, the Resource Efficient Building Ordinance, the Healthy Air Ordinance, the Resource Conservation Ordinance, and the Environmentally Preferable Purchasing Ordinance apply a precautionary approach to specific City purchases and activities. Internationally, this model is called the Precautionary Principle.

D. As the City consolidates existing environmental laws into a single Environment Code, and builds a framework for new legislation, the City sees the Precautionary Principle approach as its policy framework to develop laws for a healthier and more just San Francisco. By doing so, the City will create and maintain a healthy, viable Bay Area environment for current and future generations, and will become a

model of sustainability.

E. 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 mother's milk 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.

F. A central element of the precautionary approach is the careful assessment of available alternatives using the best available science. An alternatives assessment examines a broad range of options in order to present the public with different effects of different options considering short-term versus long-term effects or costs, and evaluating and comparing the adverse or potentially adverse effects of each option, noting options with fewer potential hazards. This process allows fundamental questions to be asked: "Is this potentially hazardous activity necessary?" "What less hazardous options are available?" and "How little damage is possible?"

G. The alternatives assessment is also 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 determine the range of specific reasonable alternatives to be examined. For each alternative the public should consider both immediate and long-term consequences, as well as possible impacts to the local economy. H. This form of open decision-making is in line with San Francisco's historic 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 equal partners in decisions affecting their environment.

H. San Francisco looks forward to the time when the City's power is generated from renewable sources, when all our waste is recycled, when our vehicles produce only potable water as emissions, when the Bay is free from toxins, and the oceans are free from pollutants. The Precautionary Principle provides a means to help us attain these goals as we evaluate future laws and policies in such areas as transportation, construction, land use, planning, water, energy, health

care, recreation, purchasing, and public expenditure.

I. 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 San Francisco speed this process of change by moving beyond finding cures for environmental ills to preventing the ills before they can do harm.

Sec. 101. THE SAN FRANCISCO PRECAUTIONARY PRINCIPLE.

The following shall constitute the City and County of San Francisco's Precautionary Principle policy.

All officers, boards, commissions, and departments of the City and County shall implement the Precautionary Principle in conducting the City and County's affairs:

The Precautionary Principle requires a thorough exploration and a careful analysis of a wide range of alternatives. Based on the best available science, the Precautionary Principle requires the selection of the alternative that presents the least potential threat to human health and the City's natural systems. Public participation and an open and transparent decision making process are critical to finding and selecting alternatives.

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 cost effective measures to prevent the degradation of the environment or protect the health of its citizens. 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.

Where there are reasonable grounds for concern, the precautionary approach to decision-making is meant to help reduce harm by triggering a process to select the least potential threat. The essential elements of the Precautionary Principle approach to decision-making include:

1. 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.

2. 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.

3. 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.

4. Full Cost Accounting: When evaluating potential alternatives, there is a duty to consider all the reasonably foreseeable 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 benefits and time thresholds should be considered when making decisions.

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

Sec.102. THREE YEAR REVIEW.

No later than three years from the effective date of this ordinance, and after a public hearing, the Commission on the Environment shall submit a report to the Board of Supervisors on the effectiveness of the Precautionary Principle policy.