COMMISSION ON THE ENVIRONMENT
CITY AND COUNTY OF SAN FRANCISCO

RESOLUTION NO. *021-98-COE* ***September 8, 1998***

FOR THE CITY AND COUNTY OF SAN FRANCISCO: DIOXIN, PUBLIC HEALTH, AND THE ENVIRONMENT]

{Adopted as Amended by COE, September 8, 1998}

Whereas, the term dioxin represents a group of chemicals which includes furan and biphenyl compounds[1] with the most well-known dioxin, 2,3,7,8-TCDD, believed to be the single most carcinogenic chemical known to science[2];

Whereas, dioxin is a toxic waste byproduct that occurs when chlorinated waste is burned and when other organic chemicals that contain chlorine are manufactured and which in itself has no commercial or industrial use[1];

Whereas, dioxin is dangerous to human health, is ubiquitous in the worldwide environment[1] and is a known human carcinogen[3] and reproductive toxicant;

Whereas, the U.S. EPA estimates that the lifetime risk of getting cancer from dioxin exposure is above generally accepted safe levels[4], and the U.S. EPA's Draft Dioxin Reassessment has found dioxin 300,000 times more potent as a carcinogen than DDT (the use of which was banned in the U.S. in 1972)[5];

Whereas, dioxin is an endocrine disrupting chemical affecting thyroid and steroid hormones and almost every hormone system examined has been shown to be altered by dioxin in some cell-type, tissue or developmental stages[6],

Whereas, dioxin has been linked to endometriosis[7], immune system impairment, diabetes, neurotoxicity, birth defects (including fetal death), decreased fertility, testicular atrophy and reproductive dysfunction in both women and men[6,8];

Whereas, dioxin exposure is significant and universal; over 90% of human exposure to dioxin occurs through diet[9,10] and every person in the world now carries a "body burden" of dioxin[5,8];

Whereas, Americans ingest a daily amount of dioxin that is already 300-600 times higher than the EPA's so-called "safe" dose[5,8] and the U.S. EPA estimates that eating just a quarter pound of Bay fish daily causes cancer risks to increase to a level of nearly one in 1,000[11];

Whereas, San Francisco residents who consume fish from the Bay are at additional risk[12]; dioxin contamination in fish reaches health advisory levels throughout the San Francisco Bay[13]; and, San Francisco Bay fish consumers are predominantly low income and people of color[12];

Whereas, dioxin is found in the breast milk of women worldwide with the highest concentrations found in women from industrialized countries[14], and nursing infants take in 50-100 times more dioxin than adults due to drinking contaminated breast milk[15];

Whereas, respected expert associations and agencies including the California Medical Association[16], the American Public Health Association[17], the Chicago Medical Society[18] and the International Joint Commission[19], comprised of the governments of Canada and the U.S., have agreed upon the need to reduce or eliminate dioxin in the environment;

Whereas, dioxin has been detected in at least 27 measurements of treated waste water discharged from pollution sources in the Bay Area[20] and the San Francisco Bay Regional Water Quality Control Board has resolved that dioxin is a high priority for immediate action to restore water quality and protect public health[21];

Whereas, sources of dioxin pollution include medical and hazardous waste incineration, the production of polyvinyl chloride (PVC) plastics, biomass combustion, diesel exhaust, pesticide manufacturing, paper production, oil refineries[22] (see attached table), and urban street runoff[23];

Whereas, the healthcare industry is one of the largest producers of dioxin in the United States[24], the only operating commercial medical waste incinerator in the state of California is located in the City of Oakland[25], San Francisco public health care institutions generate significant amounts of medical waste designated for Oakland's incinerator[26], and due to its proximity to San Francisco, the Oakland incinerator threatens or harms public health, fishing and aquatic life throughout San Francisco Bay[23,27];

Whereas, a strategy which eliminates the production of dioxin is the only viable course in protecting public health since once dioxin is produced, it is very difficult to destroy or degrade[19,27];

Whereas, adverse health effects from dioxin exposure can be reduced through purchasing decisions that reduce or eliminate products that produce dioxin (such as PVC-free plastic or chlorine-free paper); and alternative, less toxic options exist for many products that create dioxin[2],

Whereas, pollution prevention is recognized as the most effective waste management strategy[28];

Whereas, careful waste segregation has been proven to reduce dramatically the medical waste requiring incinceration[29] and cost-effective technologies which are alternatives to incineration exist for almost all the waste that does need special handling[30];

Whereas, dioxin is a clear threat to public health and the environment, zero exposure is the only strategy that truly protects public health[31], local dioxin contamination has a disproportionate

impact on low-income and minority communities[32,33]; and dioxin exposure affects all residents of San Francisco and the Bay Area[34];

therefore, be it:

Resolved, that the Commission on the Environment intends by this resolution to eliminate dioxin; and be it

Further Resolved, that the Commission on the Environment urges the Board of Supervisors and the Mayor of the City and County of San Francisco to designate dioxin pollution as a high priority for immediate action to restore water quality and protect public health; and be it

Further Resolved, that the Commission on the Environment urges the Board of Supervisors to establish a task force which would identify the sources of local dioxin pollution, including sources known to and/or emitted from the Public Utilities Commission, the Public Transportation Department, as well as any and all other City department; this task force would *also* develop dioxin pollution prevention strategies along with any associated cost implications, and make any further recommendations to implement the intent of this resolution (the elimination of dioxin); and be it

Further Resolved, that the Commission on the Environment urges the Board of Supervisors to require dioxin pollution prevention practices to be a part of all waste management and recycling programs by City departments, hospitals, and businesses which operate in the City; and be it

Further Resolved, that the Commission on the Environment urges the Board of Supervisors to ensure that less-toxic, non-chlorinated, sustainable alternative products and processes, such as chlorine-free paper and PVC-free plastics, are actively supported and used by the City and County of San Francisco; and be it

Further Resolved, that the Commission on the Environment urges the Board of Supervisors to join it in urging the Department of Public Health to educate people who live and work in San Francisco, and others as appropriate, about the health and environmental effects of dioxin; and be it

Further Resolved, that the Commission on the Environment urges the Board of Supervisors to join it in urging the Department of Public Health to report to the Commission on the Environment and the Board of Supervisors how much it would cost and what it would take for San Francisco-based health care institutions to reduce PVC use and eventually become PVC-free; and be it

Further Resolved, that the Commission on the Environment urges the Mayor and the Board of Supervisors to send a letter to San Francisco-based health care institutions which are operated by the City and County of San Francisco, to encourage them to phase out the use of PVC products; and be it

Further Resolved, that the Commission on the Environment urges the Mayor and the Board of Supervisors to send a letter to the City of Oakland supporting zero-dioxin emission and zero-

dioxin exposure and notifying the City of Oakland that the City and County of San Francisco has designated dioxin pollution as a high priority for immediate action to restore water and air quality and protect public health; and be it

Further Resolved, that the Commission on the Environment urges the Mayor and the Board of Supervisors to send a letter to the Bay Area Air Quality Management District (BAAQMD) supporting zero dioxin emission and zero dioxin exposure and urging the BAAQMD to eliminate dioxin pollution into the air; and be it

Further Resolved, that the Commission on the Environment urges the Mayor and the Board of Supervisors to send a letter encouraging the Regional Water Quality Board to exercise its full power and jurisdiction, as intended by the Porter-Cologne Water Quality Act and the federal Clean Water Act, to protect the quality of water from degradation and to implement a plan to phase out dioxin discharges and sources; and be it

Further Resolved, that the Commission on the Environment urges the Mayor and the Board of Supervisors to send a letter to the U.S. Environmental Protection Agency supporting its proposal to require community right to know reporting of dioxin releases and supporting the National Environmental Justice Advisory Committee's advice to make dioxin pollution of San Francisco Bay a high priority under Clean Water Act section 303(d).

I hereby certify that this resolution was adopted by the Commission on the Environment at its regular meeting of September 8, 1998.

Christopher Chow
Commission Secretary

VOTE:
Ayes: *Commissioners, Eng, Evans, Krefting, Okamoto, Richardson, and Russell.*
Noes: *None.*
Recused: *Commissioner Vietor.*

Commission on the Environment

Dioxin Resolution Citations

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2. Healing the Harm: Eliminating the Pollution from Health Care Practices, Health Care Without Harm Campaign Report, 1997; and Huff, 1994.
3. International Agency for Research on Cancer (IARC) of the World Health Organizations, United Nations, 1997. National Toxicology Program Board of Scientific Counselors of the National Institute of Environmental Health Sciences, 1997
4. Mariani, Jay. Dioxin Fact Sheet, Environmental Law and Justice Clinic, Golden Gate University, San Francisco, 1998.
5. US EPA. Risk Characterization of Dioxin and Related Compounds—Draft Scientific Reassessment of Dioxin. Washington, D.C.: Bureau of National Affairs. May 3, 1994..
6. Birnbaum, Linda et al. Developmental Effects of Dioxins and Related Endocrine Disrupting Chemicals. Experimental Toxicology Division, US EPA. Toxicology Letters, p. 743-750, 1995.
7. Rier, S.E. et al. Endometrosis in Rhesus Monkeys (Macaca Mulatta) Following Chronic Exposure to 2,3,7,8-Tetrachlorodibenzo-p-dioxin. Fundamental and Applied Toxicology, Vol. 21, pp.433-441, 1983.
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9. Schecter, A., 1991. Levels of Dioxins, Dibenzofurans, PCB and DDE Congeners in Pool Food Samples Collected in 1995 at Supermarkets Across the United States. Chemosphere, Vol. 34, Nos 5-7, pp. 1437-1447, 1994; and Congener-Specific Levels of Dioxin and Dibenofurans in U.S. Food and Estimated Daily Dioxin Toxic Equivalent Intake, Environmental Health Perspectives, 1994.
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11. U.S. EPA. Economic Analysis of the Proposed California Water Quality Toxics Rule, pp. 8-11, 1997.
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13. OEHHA. "Health Hazard: Catching Fish and Easting Sport Fish in California", Interim Sport Fish Advisory for San Francisco Bay. California Office of Environmental Health Hazard Assessment, California, EPA. December, 1994.
14. Schechter, A. Dioxins in Humans and the Environment. Biological Basis for Risk Assessment of Dioxins and Related Compounds, Banbry Report 35: 169-214. 1991.
15. Linstrom, Gunilla, et al. Workshop on Perinatal Exposure to Dioxin-like Compounds I. Summary, Environmental Health Perspectives, Volume 103, Supplement 2, March 1995.
16. California Medical Association, Resolution, 1998.
17. American Public Health Association, Resolution 9607, 1996.
18. Chicago Medical Society, Resolution, 1998.
19. Sixth Biennial Report on Great Lakes Water Quality, Washington, D.C. and Ottawa, Ontario: International Joint Commission, 1992.
20. Self-monitoring Reports Submitted to to the RWQCB by the Tosco, Unocal, and Pacific Refining Oil Refineries and the San Francisco Southeast, San Jose/Santa Clara, Sunnyvale, Union Sanitary District, and West County Agency Sewage Treatment Plants.
21. Regional Water Quality Control Board, Policy Statement on Dioxin, February 18, 1998.
22. Thomas, V. et al. An Estimation of Dioxin Emissions in the United States. Department of Chemistry and Center for Energy and Environmental Studies, Princeton University. Toxicological and Environmental Chemistry, Vol. 50, pp. 1-37. 1995.
23. Maher, D. et al., 1997. PCDD/PCDFS Levels in the Environment: In Storm Water Outfalls Adjacent to Urban Areas and Petroleum Refineries in San Francisco Bay, CA, USA. Organohalogen Compounds, Vol. 32.
24. California Technical Support Document for Medical Waste Incinerators, California Air Resources Board, 1990. Dioxin Sources, US EPA, 1996.
25. California Air Resources Board Medical Waste Inventory, 1997.
26. Bay Area Hospital Medwaste Survey, Jennifer Altman Foundation, March, 1998.
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28. Pollution Prevention Act of 1990, U.S. Congress.
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30. California Technical Support Document for Medical Waste Incinerators, California Air Resources Board, 1990.
31. Seventh Biennial Report on Great Lakes Water Quality, International Joint Commission, 1994.
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