

Passed unanimously  
February 2, 1999

**RESOLUTION FOR THE CITY OF OAKLAND  
ESTABLISHING A REGIONAL TASK FORCE AND POLICY ON  
DIOXIN, PUBLIC HEALTH AND THE ENVIRONMENT**

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<sup>1</sup> and is a known human carcinogen (3);

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 Dioxin Reassessment has found dioxin 300,000 times more potent as a carcinogen than DDT (the use of which was restricted 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<sup>11</sup>;

Whereas, Oakland 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 woman 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, workers often face disproportionately high exposures to toxic and/or hazardous substances found in their work places, and often there are alternative technologies that can reduce or eliminate the exposure;

Whereas, pollution prevention programs are good for the economy because they result in a net increase in employment, facilitating the just transition of displaced workers from jobs in dioxin-creating industries to jobs in pollution prevention and recycling industries;

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 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, major 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), and urban street runoff (23), municipal waste incineration, secondary copper smelting, sewage sludge incineration, residential wood burning, forest fires, industrial wood burning, cement kilns;

Whereas, the healthcare industry is one of the largest producers of dioxin in the United States (24), Bay Area and out-of-state public health care institutions generate significant amounts of medical waste that threatens or harms public health, fishing and aquatic life throughout San Francisco Bay (23,25);

Whereas no regulatory authority considers the additive effect of all the dioxin sources on the surrounding community,

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 (19,25);

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 (26);

Whereas, careful waste segregation has been proven to reduce dramatically the medical waste requiring incineration (27) and cost-effective technologies which are alternatives to incineration exist for almost all the waste that does need special handling (28);

Whereas, dioxin is a clear threat to public health and the environment, zero exposure is the only strategy that truly protects public health (29), local dioxin contamination has a disproportionate impact on low-income and minority communities (30,31); and dioxin exposure affects all residents of Oakland and the Bay Area (32);

Whereas, that the City of Oakland has sent 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).

Therefore, be it:

Resolved, that the City of Oakland intends by this resolution to encourage elimination of dioxin emissions wherever possible; and be it

Further Resolved, that the City of Oakland designates dioxin pollution as a high priority for immediate action to restore water, air, soil, and food quality and protect public health; and be it

Further Resolved, that the City of Oakland will work with other local governments to convene a regional task force to identify and quantify the sources of regional dioxin pollution, including sources from all municipal practices; 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 City of Oakland intends to implement dioxin pollution prevention practices in all waste management and recycling programs by City departments, and encourage such pollution prevention practices in all hospitals and businesses that operate in the City; and be it

Further Resolved, that the City of Oakland promotes less-toxic, non-chlorinated, sustainable alternative products and processes, such as chlorine-free paper and PVC-free plastics, to the extent possible; and be it

Further Resolved, that the City of Oakland urges Oakland health care institutions to reduce PVC use and eventually become PVC-free; and be it

Further Resolved, that the City of Oakland forwards this resolution, and encourages the Port of Oakland to adopt a similar resolution; and be it

Further Resolved, that city staff will recommend to council ways the city can prevent dioxin pollution; and be it

Further Resolved, that the City of Oakland is committed to protecting Oakland jobs and therefore will pursue dioxin reduction practices that do not cause workers to become unemployed; and be it

Further Resolved, that the City of Oakland will send a letter to Oakland-based health care institutions, to encourage them to phase out the use of PVC products; and be it

Further Resolved, that the City of Oakland send a letter to the Bay Area Air Quality Management District (BAAQMD) supporting zero dioxin emissions and zero dioxin exposure and urging the BAAQMD to eliminate dioxin pollution into the air; and be it

Further Resolved, that the City of Oakland 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 at its sources.

#### Dioxin Resolution Citations:

1. Courture, L. et al., 1990. A Critical Review of the Developmental Toxicity and Teratogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin: Recent Advances Toward Understanding the Mechanism. *Teratology* 41:619-627, 1990.
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.
8. DeVito, Michael et al. Comparisons of Estimated Human Body Burdens of Dioxin-like Chemicals and TCDD Body Burdens in Experimentally Exposed Animals, pp. 820-831, 1995. Economic Analysis of the Proposed California Water Quality Toxics Rule, US EPA, 1997.
9. Schechter, 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.
10. Testimony of Dr. William Farland in the dioxin science workshop heard by the RWQCB May 7, 1998.
  11. U.S. EPA. Economic Analysis of the Proposed California Water Quality Toxics Rule, pp. 8-11, 1997.
  12. RWQCB et al. Contaminant Levels in Fish Tissue from San Francisco Bay, 1995.
  13. OEHHA. "Health Hazard: Catching Fish and Eating 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 Zero Dioxin Exposure Alliance Letter to Loretta Barsamian, Executive Director, Regional Water Quality Board, San Francisco Bay Region, February 6, 1998.
  26. Pollution Prevention Act of 1990, U.S. Congress.
  27. American Hospital Association. "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities". 1993.
  28. California Technical Support Document for Medical Waste Incinerators, California Air Resources Board, 1990.
  29. Seventh Biennial Report on Great Lakes Water Quality, International Joint Commission, 1994.
  30. Moffat,S. "Minorities Are More Likely To Live Near Toxic Sites". Los Angeles Times, p. B1. August, 1995.
  31. National Environmental Justice Advisory Committee to the U.S. EPA, June 3, 1998.
  32. Schechter, A., Dioxins in U.S. Food and Estimated Daily Intake. Chemosphere, Vol. 29, Nos. 9-11, pp.2261-2265, 1994.