

**Resolution No. 005-01-COE**  
[Batteries]

URGING THE CITY AND COUNTY OF SAN FRANCISCO TO REQUIRE THAT CITY DEPARTMENTS PURCHASE AND USE ONLY RECHARGEABLE BATTERIES AND URGING THE CITY AND COUNTY OF SAN FRANCISCO TO INCREASE BATTERY RECYCLING.

WHEREAS, the Sustainability Plan of the City and County of San Francisco establishes the goal of minimizing risks to human health and the environment by striving to eliminate hazardous materials and hazardous waste; and,

WHEREAS, batteries containing cadmium, mercury, silver, lead, cobalt, nickel, zinc or other heavy metals may be toxic, hazardous materials or hazardous waste; and,

WHEREAS, possible health effects associated with ingestion or inhalation of water, food, or air that has been contaminated with high levels of cadmium, mercury, and other heavy metals range from headaches and abdominal discomfort to seizures, cancer, comas, and even death<sup>1</sup>; and,

WHEREAS, cadmium is an acutely toxic metal and a known carcinogen that has been shown to have the following toxicological effects: lung, liver, and kidney damage, fragile bones, anemia, and decrease in male fertility; and,

WHEREAS, one pre-1996 mercury battery in six tons of trash exceeds the federal government's allowable limit for mercury in solid waste<sup>2</sup>; and,

WHEREAS, most batteries are discarded with ordinary municipal solid waste rather than recycled or treated as hazardous waste; and,

WHEREAS, in landfills, heavy metals in batteries have the potential to leach into soil, ground water, and surface water; and,

WHEREAS, emissions from municipal solid waste incineration are a major source of both air and water pollution, leading to bioaccumulation of mercury and cadmium in the food chain; and,

WHEREAS, batteries mixed with municipal solid waste have the potential to explode, cause fires, or harm workers when processed; and,

WHEREAS, the goal of the federal Mercury-Containing and Rechargeable Battery Management Act of 1996 (Battery Act) is to phase out the use of mercury in batteries and encourage increased

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<sup>1</sup> U.S. EPA. 1997. Implementation of the Mercury-Containing and Rechargeable Battery Management Act. EPA530-K-97-009.

<sup>2</sup> <http://www.epa.gov/grtlakes/seahome/housewaste/house/battldr.htm>

recycling of used nickel-cadmium batteries (Ni-Cd), small sealed lead-acid batteries (SSLA), and certain other batteries<sup>3</sup> by making battery recycling efficient and cost-effective, and,

WHEREAS, small, round "button cell" batteries are allowed to contain up to 25 mg mercury under the Battery Act, and may also contain silver, cadmium, or other heavy metals; and,

WHEREAS, it is likely that a significant number of batteries containing mercury that were manufactured prior to passage of the Battery Act have yet to be disposed; and,

WHEREAS, Ni-Cd rechargeable batteries were estimated to contribute approximately 54 percent of the cadmium found in municipal solid waste in 1998<sup>4</sup>; and,

WHEREAS, a rechargeable battery that can be charged up to 1,000 times<sup>5</sup> can substitute for hundreds of single-use batteries over its useful life<sup>6</sup>; and,

WHEREAS, US EPA reported in 1997 that 80 percent of rechargeable batteries were composed of nickel and cadmium<sup>7</sup>; and,

WHEREAS, both rechargeable Ni-MH and rechargeable alkaline batteries are available in standard sizes, which make them appropriate for most battery-powered consumer devices, such as pagers, flashlights, cameras, personal stereos, etc.; and,

WHEREAS, several states including Florida, Iowa, Minnesota, New Jersey, Rhode Island, and Vermont have required manufacturers and marketers of rechargeable batteries and rechargeable battery-powered products to implement programs to inform consumers of disposal laws for rechargeable batteries; ensure batteries and battery-powered products are labeled to show electrolyte and disposal options; and properly collect, transport, and recycle or dispose of the batteries and products; now, therefore be it

RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require that any City department seeking to purchase batteries shall require in the specifications for procurement of batteries, that bidders offer rechargeable batteries, with preference given to rechargeable alkaline batteries and rechargeable nickel metal hydride batteries over Ni-Cds, to the maximum extent possible within the performance standards required by the contract; and, be it

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<sup>3</sup> Mercury-Containing and Rechargeable Battery Management Act. Pub. L. No. 104-142. (May 13, 1996)

<sup>4</sup> U.S. EPA. 1998. Battery Management. <http://www.epa.gov/oaintrnt/intrnlp2/p2/opprtnty/battery.htm>

<sup>5</sup> U.S. EPA. 1997. Implementation of the Mercury-Containing and Rechargeable Battery Management Act. EPA530-K-97-009.

<sup>6</sup> U.S. EPA. 1997. Implementation of the Mercury-Containing and Rechargeable Battery Management Act. EPA530-K-97-009.

<sup>7</sup> U.S. EPA. 1997. Implementation of the Mercury-Containing and Rechargeable Battery Management Act. EPA530-K-97-009.

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require that any City department requesting purchase of nonrechargeable batteries shall set forth the performance standards required to be met necessitating the purchase of a nonrechargeable battery or battery-powered product, and shall certify that rechargeable batteries or products powered by rechargeable batteries are unavailable to meet the contract requirements<sup>8</sup>; and, be it

FURTHER RESOLVED that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require that that any City department requesting purchase of Ni-Cd rechargeable batteries include written justification of preference of rechargeable Ni-Cd chemistry over rechargeable alkaline or rechargeable Ni-MH; and, be it

FURTHER RESOLVED that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require that any rechargeable batteries purchased by the City and County of San Francisco be delivered accompanied by detailed recycling instructions and any batteries containing cadmium, mercury or lead include a written explanation of the toxic hazards of these substances in the waste stream; and, be it

FURTHER RESOLVED that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require City departments, when buying products that include or incorporate rechargeable battery packs, to give purchasing preference to products that include or incorporate rechargeable Ni-MH batteries over Ni-Cd batteries; and, be it

FURTHER RESOLVED that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require City departments, when buying batteries or products that include or incorporate batteries, to give preference to vendors that offer to take spent batteries back and recycle them; and, be it

FURTHER RESOLVED that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require City departments, when buying products that include or incorporate batteries, to give preference to products in which the batteries are easily removable with standard tools; and, be it

FURTHER RESOLVED that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require that City departments, when buying battery chargers, purchase chargers that recharge Ni-MH batteries as well as Ni-Cd batteries; and, be it

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<sup>8</sup> Performance standards and specifications shall bear reasonable relation to the function or intended end use of the product.

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to require that manufacturers and marketers of batteries and battery powered products sold in San Francisco work with the Solid Waste Management Program to : 1) develop and implement a program to inform City and County residents, businesses, and City departments about recycling and proper disposal of batteries; 2) ensure batteries and products are labeled to show battery chemistry and recycling and proper disposal options; 3) properly collect, transport, and recycle the batteries and products they sell; and 4) include rechargeable alkaline batteries in their recycling schemes; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to urge the State of California to consider legislation that would institute a deposit system for nonrechargeable batteries and Ni-Cd rechargeable batteries and ban Ni-Cds and Ni-MH batteries from disposal in solid waste landfills and incinerators; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges the Solid Waste Management Program to work with the Department of Public Health and battery manufacturers and recyclers to develop a plan and budget for an expanded, affordable battery recycling program for the City departments, including funding of battery collection, transportation, and recycling by battery manufacturers; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges all City departments to participate in the City's battery recycling program; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges the Solid Waste Management Program to report annually to the Commission on the Environment on the types and amounts of batteries purchased, collected from and recycled by City departments, make recommendations to the Commission on the Environment on actions that the City could take regarding batteries, and report on the feasibility of "Extended Producer Responsibility" to address problems with batteries throughout San Francisco.

*I hereby certify that this resolution was adopted by the Commission on the Environment at its special meeting on June 25, 2001.*

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*Sraddha Mehta*  
*Commission Secretary*

**VOTE:**

**Ayes:** *Commissioners Hayes, Evans, Bingham, and Shah.*

**Noes:** *None.*

*Absent: Commissioners Werbe, Rodriguez, and Bradford-Bell.*