March 21, 2003

Before the Board of Health of King County, State of Washington

RULES AND REGULATIONS NO. 03-4

An amendment for the protection of the public health from exposure to mercury; revising Title 10 of the Code of the King County Board of Health, enacted pursuant to RCW 70.05.060 including the latest amendments and revisions thereto.

BE IT ADOPTED BY THE KING COUNTY BOARD OF HEALTH:

SECTION 1. There is hereby added a new chapter to Title 10 of the Code of the King County Board of Health to read as follows:

Chapter 10.88

Mercury Fever Thermometer Sales Prohibition

Sections:
10.88.010 Purpose and Findings
10.88.020 Definitions
10.88.030 Applicability
10.88.040 Prohibitions
10.88.050 Monitoring and Enforcement
10.88.060 Penalties
10.88.065 Severability

10.88.010 Purpose and Findings. A. Statement of Purpose. The purpose of this chapter is to protect human health and the environment from exposure to mercury by banning the sale of mercury fever thermometers.

B. Findings.
1. Mercury is a highly toxic, naturally occurring heavy metal that moves between water, air and soil as a result of natural and human activities. It is a persistent and bioaccumulative substance that can damage the central nervous system, especially during fetal and childhood development.

2. The general public is primarily exposed to mercury’s toxic effects through the ingestion of fish that have been contaminated with mercury. Approximately 95% of the mercury found in fish is in the form of methylmercury, a neurotoxin and a particularly toxic form of mercury. Because methylmercury is a neurotoxin (particularly toxic to the developing nervous system), unborn fetuses and young children are especially susceptible to mercury’s toxic effects.

3. 40 states, including Washington, have issued fish advisories that warn certain individuals to restrict or avoid consuming mercury-contaminated fish. The Washington State Department of Health advises women of childbearing age and children under the age of six not to eat any shark, swordfish, tilefish, king mackerel, or fresh or frozen tuna steaks and to limit the amount of canned tuna eaten, based on bodyweight.

4. A 2000 National Academy of Sciences report concluded that “available consumption data and current population and fertility rates indicate that over 60,000 newborns annually might be at risk for adverse neurodevelopmental effects from in utero exposure to methylmercury.” In March 2001, based on data from the Centers for Disease Control, the US Environmental Protection Agency estimated that 10% of US women of child-bearing age have levels of mercury that double their risk of having babies born with mental or neurological problems.
5. Exposure can occur by inhalation of or bodily contact with elemental mercury from a broken product (e.g., mercury fever thermometer) or from a manufacturing process. In these cases, mercury can be in its elemental form or combined with an inorganic element or compound.

6. Acute mercury exposure can cause headaches, salivation, a metallic taste in the mouth, chills, cough, fever tremors, abdominal cramps, diarrhea, nausea, vomiting, chest tightness, difficulty breathing, fatigue and/or lung irritation. Chronic mercury exposure can cause central nervous system effects, kidney damage and/or birth defects.

7. When a mercury thermometer breaks during use, the mercury vaporizes, posing a health risk to humans. Mercury that volatilizes enters the environment and can be deposited in lakes and rivers. Each mercury thermometer contains approximately 1 gram of mercury.

8. Nationally, mercury fever thermometers discarded in the garbage contributed 17 tons of mercury to the solid waste stream annually.

9. In King County, according to survey data collected in 2001, 43 percent of King County households have one or more mercury fever thermometers. An estimated 300,000 mercury fever thermometers containing approximately 300 pounds of mercury exist in King County homes. These thermometers may be discarded to King County’s landfill or wastewater treatment facilities.

10. Several states and cities around the world have demonstrated that removal of mercury-containing products, such as mercury fever thermometers, from the waste stream is an effective way to reduce mercury contamination. The U.S. Environmental
Protection Agency, the American Hospital Association and the American Public Health
Association are currently implementing programs to eliminate mercury waste.

11. There are accurate and safe alternatives to mercury fever thermometers that
are readily available and comparable in cost.

10.88.020 Definition. The term Mercury fever thermometer for purposes of this Chapter
means a mercury-containing product used for measuring body temperature. An electronic
thermometer with a button battery containing mercury is not considered to be a mercury
fever thermometer under this rule.

10.88.030 Applicability. The requirements of this chapter apply to all persons, including
retail establishments.

10.88.040 Prohibitions. No person may sell mercury fever thermometers in King
County unless the mercury thermometer is prescribed for a condition that requires such a
thermometer. Any mercury thermometer sold through prescription shall be accompanied
by written instructions, furnished by the Local Hazardous Waste Management Program in
King County, on how to avoid breakage and on proper cleanup should breakage occur.

10.88.050 Enforcement. This chapter shall be enforced by the health officer in
accordance with the provisions of this chapter and Chapter 1.08 of this Code.

10.88.060 Penalties. Any person who sells a mercury fever thermometer in violation of
the provisions of this chapter shall be subject to a civil penalty in accordance with Chapter
1.08 of this Code.

10.88.065 Severability. If any part or provision of this regulation, or the application
thereof to any person or circumstance, is held invalid, the remainder of this rule, including
the application of such part or provision to other persons or circumstances, shall not be
affected thereby and shall continue in full force and effect. To this end, the provisions of
this rule are severable.

Adopted this 21st day of March, 2003.

KING COUNTY BOARD OF HEALTH
KING COUNTY, WASHINGTON

s/Carolyn Edmonds/s
Chair

ATTEST:

s/Alonzo Plough/s
Director of Health