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TESTIMONY ON LD 743
ELECTRONIC RECYCLING

BEFORE THE JOINT COMMITTEE ON
NATURAL RESOURCES

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March 6, 2003

Mr. Chairmen and members of the Committee, I am Ric Erdheim, Senior Manager for Government Affairs with the National Electrical Manufacturers Association (NEMA). NEMA represents manufacturers of electrical products including batteries, lamps and thermostats. I also am Executive Director of the Thermostat Recycling Corporation, a corporation established by manufacturers to take back mercury switch thermostats. I am one of two US delegates to the International Electrotechnical Commission (IEC's) Advisory Committee on Environmental Aspects that develops environmental policy for IEC committees. Vermont Governor Howard Deen appointed me twice to serve on the Vermont Mercury Advisory Committee. Prior to coming to NEMA in 1995, I was the Environmental Legislative Assistant to Senator Frank R. Lautenberg of New Jersey. I played a significant role in passage of a number of Federal laws including the Clean Air Act Amendments of 1990, the Federal Pollution Prevention Act, the Ocean Dumping Ban Act and the Mercury-Containing and Rechargeable Battery Management Act. I also served on the Montgomery County Solid Waste Advisory Committee from 1992-2000 and served as chair of the Committee for two years.

I am here to testify against LD 743. This well-intentioned bill attempts to address a wide range of alleged problems with the disposal of all electrical and electronic products and the use of specified constituents in such products. It is not, however, based on any analysis showing that the disposal of **all** of these products or that use of certain constituents creates significant problems. At the same time the bill would impose significant costs on the Maine economy including diminishing public safety. The bill also is inconsistent with the mercury legislation passed by this legislature. If Maine believes there is a problem it should identify the scope of the problem and work with industry and others in the distribution chain to develop cost-effective solutions.

There are a number of principles that should be followed in deciding whether to act on a potential problem. LD 743 fails to adhere to these principles.

PRINCIPAL ONE: THE SCOPE OF THE PROPOSAL NEEDS TO ADDRESS SIGNIFICANT PROBLEMS AND NOT BE OVERLY BROAD.

Governments need to take into consideration scientific, environmental, product safety and economic factors affecting individual categories of products rather than the broad scope of electrical and electronic products. These factors differ from product category to product category and will affect the possible justification for regulatory requirements. NEMA does not support a one-size-fits all approach because it may lead to programs that do not support cost-effective, environmentally sound results. Product categories reviewed should be prioritized based on the volumes and toxicity of waste rather than the broad category of electrical and electronic products.

LD 743 violates this principle by addressing virtually every electrical and electronic product when there has been no analysis showing that each of these products creates some environmental problem. The bill defines “electronic equipment” to cover any equipment that uses electricity or that contains a printed circuit board. This covers virtually every piece of equipment in existence including industrial, medical, safety, home appliance and consumer entertainment equipment.

Individual types of electrical and electronic products, however, are vastly different in terms of: the number of units sold, the size and fragility of the products, their constituents, their distribution channels and users and the availability and attributes of alternatives.

We are aware of no data showing that each of these types of equipment presents a disposal problem either in terms of toxicity or volume. The equipment ranges in costs from \$7.00 home smoke detectors to automobiles to \$1,000,000 pieces of industrial or medical equipment. The users of the equipment range from children to large industrial facilities and hospitals. The numbers of each type of equipment vary greatly as do the constituents of such equipment. And the attributes of the equipment vary from entertainment to safety, environmental protection, public health and commerce. Electronic equipment as defined in the bill includes energy efficient equipment that the state promotes including screw in compact fluorescent lamps, electromagnetic ballasts and programmable thermostats and products used for public safety including smoke detectors and sprinklers.

The bill also identifies a printed circuit board as a basis for action. The use of a printed circuit board is not a basis for establishing a large and complex regulatory program. The amount of lead in the solder of a printed circuit board is very small, both per product and cumulatively (0.5% of US lead use).

PRINCIPAL TWO: SUBSTANCE BANS NEED TO BE BASED ON RISK ASSESSMENTS SHOWING HARM FROM DISPOSAL OF A PRODUCT.

Substances should not be banned or restricted until an appropriate environmental risk assessment and an economic assessment for the substance has been conducted to avoid unintended adverse consequences. These assessments must consider the ready availability, and environmental impact and cost of substitutes, and any loss of functionality (reliability or performance) or product safety from use of such substitute. Any process for establishing or revising substance bans or restrictions must be transparent. A determination to ban or restrict a substance being used in products and the time frame for such a restriction or ban must be based on an environmental risk and economic assessment using sound science and an understanding of the effect of its use in products including its performance and consumer needs.

LD 743 targets a number of substances based on the hazard of a substance. It does not, however, reflect the risk to humans, wildlife or the environment because it does not consider actual risk that considers the hazard of a substance and exposure to that substance. Without exposure there is no risk irrespective of the inherent hazard of the substance. The risks posed by the vast majority of, if not all, electronic products are minimal because there is little exposure to the products’ constituents.

Brominated Flame Retardants

Brominated flame-retardants include 75 different chemicals of which only four have received any regulatory attention. Yet this bill would ban the use of all such flame-retardants notwithstanding the lack of concern about most of the retardants and ignore that these retardants provide critical fire safety and in many cases are required by fire safety standards.

Mercury/Lead/Cadmium

Data (see attachment from EPA) from the USEPA shows that municipal solid waste incinerator emissions of lead, cadmium and mercury have been significantly reduced, each by over 90%. These emissions amount to less than 2% of all mercury emissions in the US let alone from sources outside the US. The New Jersey Department of Environment's 2002 mercury report says, "Low concentration of mercury in landfill gas...argues that no efforts to control this source are necessary at this time." (p. 157). The Florida Department of Environmental Protection has published data showing significant declines in mercury levels in fish and birds over the last decade. A USEPA 1988 report on landfill leachate found no violations of regulatory requirements for lead. The recently released CDC report on toxic substances shows a significant decline in children's blood lead levels. This is likely the result of the elimination of leaded gasoline and efforts to clean up lead paint in housing.

Polyvinyl Chloride

Polyvinyl chloride (PVC or vinyl) is not a "hazardous material." PVC's resistance to breakdown under high electrical voltage and its ability to bend without cracking make it the leading material for wire and cable insulation. Vinyl is one of the few materials able to meet the National Electrical Code of the National Fire Protection Association.

A report, "Environmental, Health and Safety Issues in the Coated Wire and Cable Industry, Background Research Report," prepared in March 2002 for the Toxics Use Reduction Institute (TURI) in Massachusetts found that shipments of insulated products (excluding fiber-optic products) from U.S. wire and cable manufacturers totaled nearly \$12 billion in 1996 and \$18 billion in 1999. PVC jacketed cables made up approximately 50% of the materials used to insulate wire.

The report further found that PVC is typically used in the cabling industry because of its superior flexibility and flame retardant properties, and that addressing the various environmental, health and safety issues of alternative coated wire and cable is not a simple and straightforward process. The complexity of the products and stringent electrical and safety performance standards make it difficult to find a single 'greener' alternative, according to the report.

Recent EU directives on waste electrical and electronic equipment (WEEE, Directive 2002/96/EC, Jan. 27, 2003) and hazardous substances in manufactured equipment (RoHS, Directive 2002/95/EC, Jan. 27, 2003) sets a date by which firms are financially responsible for their own goods and collectively responsible for recycling all waste generated from products put on the market before that date. PVC is *not* included in the hazardous materials listed under these directives. (See http://europa.eu.int/eurlex/en/dat/2003/l_037/l_03720030213en00240038.pdf. While some argue that the disposal of PVC is a source of dioxin in the environment, a recent Center For Disease Control report showed no measurable amount of dioxin in human blood.

Conclusion

The bill is simply a laundry list of substances without any analysis that the disposal of products containing these substances presents a risk. It also is inconsistent with provisions in Maine law that deals with the use of mercury in products.

PRINCIPAL THREE: COLLECTION REQUIREMENTS MUST BE BASED ON AN EVALUATION OF THE BENEFITS AND COSTS OF RECOVERY AND MUST INVOLVE EVERYONE IN THE CHAIN OF DISTRIBUTION, USE AND DISPOSAL.

Any recovery requirements should be based on an assessment of benefits and costs of recovery for individual categories of products. Where such an assessment shows recovery is necessary, government and industry should work together to identify a cost-effective solution that includes appropriate roles for all interested parties including manufacturers, distributors, retailers, users, recyclers and governments. Such solutions must be harmonized throughout the political unit. To the maximum extent possible recovery efforts should rely on existing infrastructures. Manufacturers should not be solely liable for the costs of recovery of new products. Manufacturers should not be liable for the recovery of historical wastes. Recovery targets should be established only after sufficient experience has been gained. Recovery targets should not be constructed to allow for the establishment of product design standards.

The USEPA's product stewardship program calls on those in the product life cycle--manufacturers, retailers, users, and disposers--to share responsibility for reducing the environmental impacts of products.

“Product stewardship recognizes that product manufacturers can and must take on new responsibilities to reduce the environmental footprint of their products. Without serious producer commitment, we as a country cannot make significant progress toward improved resource conservation and a sustainable economy. However, real change cannot always be achieved by producers acting alone: retailers, consumers, and the existing waste management infrastructure may have to pitch in for the most workable and cost-effective solution. The solutions and the actors will vary from one product system to another.”

NEMA opposes the manufacturer take back provisions in LD 743 because they would impose a costly and inefficient system to recover “electronic equipment” and exclude those other than manufacturers for any responsibility. Nationwide efforts are underway to develop cost-effective efforts to address products with cathode ray tubes. Those efforts should continue to ensure that cost-effective programs are implemented.

PRINCIPAL FOUR: STATES SHOULD NOT ADOPT LABELING REQUIREMENTS FOR PRODUCTS SOLD IN INTERSTATE COMMERCE.

Education on proper handling of spent materials may be appropriate in certain circumstances. NEMA opposes state labeling requirements because manufacturers of products sold in interstate commerce cannot make products for individual states. If information is needed Maine should work with industry to develop cost-effective approaches such as the lamp industry’s lamp recycling website, www.lamprecycle.org or EIA’s electronics recycling website, www.eiae.org.

CONCLUSION

NEMA believes that consideration of this bill by Maine is premature. There is a significant lack of analysis to justify its scope or its provisions. Adoption of the bill could result in significant adverse affects in Maine in products that are essential to the economy, the environment or public health or safety. NEMA urges the Maine DEP to first identify and document what problem it wants to address and then determine the most cost-effective manner to address that concern.