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**Submitted electronically to:** Department of Ecology Public Comment Form at https://ecology.commentinput.com/?id=rgVDWh4aJ

Re: Mercury Lights Program Rulemaking- Chapter 173-910 WAC - Comment Period #1

Dear Mr. Fredley:

The National Electrical Manufacturers Association ("NEMA") appreciates the opportunity to submit initial comments on the draft amendments to Chapter 173-910 WAC – Mercury-Containing Lights Product Stewardship Program proposed by the Department of Ecology ("Department") on 17 August 2026 ("draft"). Members of NEMA's Lighting Systems Division are strong supporters of the LightRecycle Washington program ("Program") and helped to establish the Mercury Lamp Recyclers Association[1,2] as the new stewardship organization supporting Washington State consumers following PCA Product Stewardship Inc.'s abrupt departure from the role.

NEMA represents over 300 electrical equipment manufacturers that make safe, reliable, and efficient products and technologies that power, connect, and light our world. Together, our members contribute a full 1% of U.S. GDP and directly provide over 590,000 American jobs, adding more than $375 billion to the U.S. economy. Learn more at makeitelectric.org.

NEMA members supported the authorizing legislation, House Bill 1185-2023-24, and proposed the Bill's provision enabling Washington consumers to recycle an unlimited number of screw base compact fluorescent lamps (CFLs). Likewise, we're pleased to support the Department's implementation of the updated regulations and enter the following requests and suggestions to help streamline the process.

As an overarching comment, NEMA strongly encourages the Department of Ecology to utilize this opportunity to solidify the Program's regulatory language in a way that aligns with the Program as it

[1] More information at mercurylamprecyclers.org

[2] *Lamp* is the standardized industry term for a product commonly known to consumers and end users as a *light bulb,* or as a *light* in Chapter 70A.505 RCW. See ANSI/IES LS-1-25, Lighting Science: Nomenclature and Definitions for Illuminating Engineering

has been executed in practice for 13 years. While the original language contained some ambiguity (much of which has carried over to this rulemaking), over the Program's history, a collective understanding of expectations, roles, and responsibilities has emerged. Any efforts to retroactively expand the Program's scope and/or applicability beyond agreed provisions in HB 1185 would likely create market chaos and penalize the producers in good standing who have materially and financially contributed to relaunching this service for the benefit of Washingtonians.

**Confusion Regarding Retail and Other Terminology**

The terms *retail*, *retailer*, and terms inclusive of those words are applied inconsistently throughout the draft, owing in part to preexisting language in the current regulation. NEMA members are concerned for the market confusion that is likely to result.

In the draft, the preexisting definition of *retailer*

> "*…means a person that offers mercury-containing lights for sale at retail through any means including, but not limited to, remote offerings such as sales outlets, catalogs, or the internet, but does not include a sale that is a wholesale transaction with a distributor or a retailer.*"

Invoking the term itself within its definition is inherently confusing to the regulated community and requires the Department's clarification.

In the draft, the proposed new definition of *sold at retail*

> "*…means a sales transaction to a customer at a store (either online or physical) where the EHC would be added to the purchase price. This does not include a wholesale transaction*."

Throughout the draft and in the authorizing legislation, every instance of *sold at retail* serves as a descriptor of *mercury-containing lights*. However, this proposed definition, i.e., a "*sales transaction*", is a noun. This definition must be clarified, and the initialism "*EHC"* should be replaced with "*environmental handling charge*" for consistency throughout the document. Please note the similar expression "*for sale at retail*" found within the *retailer* definition and elsewhere, and several instances of "*for retail sale*", also warrant the Department's attention to ensure thoughtful and consistent usage of terminology. Indeed, all entities to whom this chapter applies (WAC 173-910-020) rely on clear and consistently applied terminology to ensure the clear delineation of roles and responsibilities.

In the draft, the word *retail* remains undefined. This introduces confusion, for example in WAC 173-910-610 Participation Requirements, where item (1) begins by listing four wholly separate entities "*Retailers, wholesalers, distributors, electric utilities…*" who "*…give away, offer for sale, or sell… lights in or into the state for sale <u>at retail</u>…*" Statements such as these and "*for retail sale*" in relation to "*lights… distributed in or into Washington State*" conflate the listed entities' roles in the market, and must be clarified to ensure seamless implementation.

There are other ways in which a lack of definitional clarity has and likely will lead to unintended consequences:

- *Covered entities* are defined as "*A household generator or other person…"*. While *household generator* appears to be undefined (though reasonably clear), the definition of a *Person*, possibly from RCW, details eight categories of legal entities while excluding the common understanding, that is, an individual human. Clarifications are needed. Further, the definition twice relies on the term *at retail*, which is undefined in this first draft. Oddly, as phrased, a *household generator or other person* who delivers more than the definition's specified lamp quantities would not meet the definition.
- *Environmental handling charge* is partially defined by "*at retail*" to delineate which mercury-containing lights are subject to the charge. Below, the negative consequences are discussed further.
- *Market share* could be defined more effectively in terms of the data to be gathered and the calculation of those data.

**Questions Regarding Distribution**

No changes are proposed to the definition of *distributor*, which is

> **"…***an agent who supplies goods to stores and other businesses that sell to consumers."*

There are multiple types of distributors conducting multiple types of distribution. Clarity is needed regarding the Department's disposition on each.

In WAC 173-910-010, -020, and -210, the new phrase "*sold, made available for sale, or distributed in or into Washington state for retail sale in Washington state*" – and another in the present tense (-020) raise novel questions about the Department's intent with regard to distribution of mercury-containing lamps in Washington state. In each instance, the existing "*sold in or into Washington state for sale at retail*" is proposed to be replaced with the new phrasing above. While generic, because this language had been in effect for 13 years, the meaning of the existing phrase is well established and understood by NEMA members.

Producers maintain independently owned and/or contracted *distribution centers* around the country, selected to meet economic and logistical criteria. While a manufacturer may not elect to sell a given product "*in or into Washington state"*, they may make use of distribution centers located in Washington state to enable the subsequent sale of "*goods to stores and other businesses that sell to consumers"* in other states or in Canada. In such instances, Washingtonians never see this product, save for the distribution center employees moving the product in and out of their facilities. Without further clarification, the proposed new language could disrupt existing supply chains and have significant negative impacts on the flow of goods through Washington state for which divestiture may provide the only feasible resolution for producers.

Further down the supply chain, *electrical distributors* sell mercury-containing lamps primarily to industrial, commercial, and institutional purchasers, but also to household consumers. It is unclear to NEMA members if the Department has considered all of types of distributors and distribution, and how it intends for each to interact with the Program.

While the new language regarding distribution was added by the legislature, the phrasing remains constrained to products to be sold *at retail* within the state. NEMA interprets the proposed language as having no effect on the Program's applicability (WAC 173-910-020) or scope as reflected in the definitions (WAC 173-910-100).

NEMA members have many questions on this subject and may in time submit additional comments to the Department. In the interim, we request discussion with the Department to better understand the intent.

**Known and Ongoing Abuse of the LightRecycle Washington Program**

Many of the above concerns stem from NEMA members' longstanding discomfort with aspects of the LightRecycle Washington program implementation which allow covered entities to purchase fluorescent lamps from electrical distributors without paying the environmental handling charges collected by more typically consumer-facing retailers.

Likewise, it has been apparent for many years – including during the legislative process for House Bill 1185 – that the Program is consistently abused by large commercial entities – not small businesses – dropping off large quantities of linear fluorescent lamps for recycling at no cost to them. Industrial, commercial, and institutional facilities including retailers and office buildings must recycle their end-of-life mercury-containing lamps. Those facility operators who purchase qualifying lamps at retail with the environmental handling charge included may utilize the Program for recycling so long as daily drop-off limits by lamp type are not exceeded. Mercury-containing lamps purchased through wholesale or commercial channels, where no environmental handling charge is applied, must be managed via certified hazardous waste contractors or commercial recycling partners paid for by the building owner and/or operator.

Furthermore, as implemented, many of the Program's *collectors* permit covered entities to drop off lamps for recycling without any review or approval by collector staff. No effort is made at collector sites to ensure that covered entities are not dropping off *special purpose mercury-containing lights,* as defined in the draft. Without any check on what is being dropped off or the quantity(ies) thereof, the covered entities themselves decide what goods the *transporters* will move for *processing*.

Consequently, the Program has long suffered from collection volumes far greater than the environmental handling charges could possibly cover. It is reasonable to expect producers to pay for Program costs commensurate with the types and volumes of lamps the statute envisioned. It would not, however, be acceptable to leave known abuses unaddressed, particularly as the Program moves into a producer funding model beginning 1 January 2029.

By continuing to allow unattended acceptance at collector sites, the Department would be trusting the public to make appropriate decisions about what is dropped off and in what quantities, in the face of ample evidence of longstanding consumer confusion at best, and Program abuse at worst. NEMA is not endorsing and does not support an expansion of the Program to include distribution of any kind; that would be directly in conflict with the authorizing legislation and the intent of its authors.

NEMA members request further discussion of the complexities of this topic with the Department of Ecology.

**Compact and Linear Fluorescent Lamp Definitions and Program Scope Creep**

The original 2010 authorizing legislation and its 2024 extension reference the same essential definition:

> *“"Mercury-containing lights" means lamps, bulbs, tubes, or other devices that contain mercury and provide functional illumination in homes, businesses, and outdoor stationary fixtures.”*

Correlated color temperatures above nom. 6500 K are inconsistent with appliance standard ANSI C78.376-2014 (R2021), the American National Standard for Electric Lamps – Specifications for the Chromaticity of Fluorescent Lamps, as harmonized with IEC international standards. For your awareness, it is very uncommon for CCTs above 6500 K to be used on any project whether residential, industrial, commercial, or institutional, as exceedingly few consumers globally, Washingtonians included, would perceive such products as providing “*functional illumination*”.

As previously stated to the authors of House Bill 1185, NEMA members strenuously disagree with the 24000 Kelvin limit as it represents one organization’s effort to force lighting manufacturers to pay for the recycling of odd products the vast majority of global lighting manufacturers, including NEMA member lamp manufacturers who maintain the aforementioned ANSI standard, have never manufactured, contracted for manufacture, distributed, sold, or offered for sale anywhere in the United States.

Further, “*Duv*” is a colorimetric term used to characterize solid-state lighting products[3], not fluorescent lamps of any kind, and has no basis for use in the referenced CIE uniform color space

[3] See ANSI C78.377-2024 American National Standard for Electric Lamps -Specifications for the Chromaticity of Solid-State Lighting (SSL) Products.

CAM02-UCS. The proposed application of the term is akin to applying the electric vehicle metric Miles Per Gallon of Gasoline-Equivalent (MPGe) to a gas-powered car. While the spectral output of compact fluorescent lamps of various CCTs can be evaluated inside CAM02-UCS, the Planckian locus is not typically plotted in this space, and consequently, neither are isotemperature lines delineating correlated color temperature values along the locus. The term has simply been misapplied.

NEMA would be happy to provide the Department of Ecology a complimentary copy of C78.376 with a contact on ANSI Accredited Standards Committee C78 to explain the standard and answer any questions.

**Procedures for Ending the Mercury-Containing Lights Stewardship Program**

The authorizing legislation envisioned a potential sunsetting of the program prior to 2035 “*based on the diminishing number of mercury-containing lights collected by the program reaching a de minimis level where the continued expense and environmental cost of implementing the program would result in continued costs that outweigh the benefits of continuing the program*”. For absolute clarity and the avoidance of doubt, WAC 173-910-615 (1) should be amended to add the underlined:

> “*(1) The cessation date for the mercury-containing lights stewardship program is January 1, 2035, or a<u>n earlier</u> date determined by the department…*”

NEMA requests a meeting with the Department of Ecology in the coming weeks to pose remaining questions which may inform additional comments on the draft regulation. We thank Department staff for their evidently hard work on these complex topics and welcome continued collaboration with Washington state government, MLRA, legacy producers, and all other market actors invested in the continued success of the LightRecycle Washington program for the benefit of all Washingtonians.

Please contact the unsigned at your convenience to arrange a meeting. We look forward to speaking with you.

Sincerely,

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