

Honorable Christopher Bray  
Chairman  
Senate Committee on Natural Resources and Energy  
Vermont State House  
115 State Street  
Montpelier, VT 05633

March 27, 2018

Dear Chairman Bray and Members of the Committee:

The Appliance Standards Awareness Project (ASAP) was founded in 1999 by the American Council for an Energy-Efficient Economy, the Alliance to Save Energy, the Energy Foundation, and the Natural Resources Defense Council. These leading energy efficiency and environmental organizations had been involved in appliance standards work for many years, but started ASAP in recognition that a broader, more organized advocacy effort would more consistently yield better energy efficiency standards. Over the past 19 years, ASAP has become a respected advocate for standards and a source of high quality input into both federal and state standards setting processes.

Since last year, ASAP has worked with Representatives Curt McCormack and Marcia Gardner to introduce new Vermont lighting and appliance efficiency standards as part of our effort to advance standards at the state level. After thirty years of bipartisan support for energy efficiency standards in Washington, DC the Trump administration has halted almost all standards activity at the Department of Energy (DOE), and has prevented the release of standards completed during the Obama administration. H.410 is an example of actions that Vermont, and other states, can take to improve energy efficiency and fight climate change even when the federal government will not. The appliance and lighting standards passed in Vermont last year in Act 42 (H.411) and included this year in H.410 are based on ASAP model state legislation also currently under consideration in Massachusetts, Rhode Island, New York and Washington state. ASAP is also working with the California Energy Commission to advance a similar package of standards through their rulemaking process.

The following comments are in response to written testimony on H.410 submitted to the Senate Natural Resources and Energy Committee by the Association of Home Appliance Manufacturers (AHAM) and the National Electrical Manufacturers Association (NEMA).

#### [AHAM Regarding residential ventilation fans and portable air conditioners](#)

The Senate Natural Resources and Energy Committee received written testimony dated March 21, 2018 from Ms. Sarah Pierce, Director, Government Relations at AHAM. Since then, ASAP and Representative McCormack have negotiated proposed changes to H.410 that resulted in AHAM dropping their opposition to the bill, as confirmed by Ms. Pierce in her communication with the Committee dated March 23.

After reviewing market information provided by AHAM, ASAP agrees with AHAM that the proposed energy efficiency standard in H.410 for residential ventilation fans could restrict consumer choice for downdraft and microwave kitchen range hood fans. We have confirmed that these subcategories of residential ventilation fans would be covered by the proposed standards and that few models are currently available that meet the energy efficiency requirements in H.410. ASAP agrees with AHAM that the best way to address this issue is to remove kitchen range hoods from the residential ventilation fans standards provision in the bill. Removing kitchen range hoods from H.410 also addresses additional concerns expressed by AHAM about possibly insufficient airflow. ASAP will continue to monitor the kitchen range hood market and may propose energy efficiency standards for such products in the future.

ASAP supports the intent of the changes to H.410 relevant to kitchen range hoods that Ms. Pierce proposed in her letter of March 23, but recognizes that AHAM's wording may not be appropriate for inclusion in Vermont statute. We will work with Representatives McCormack and Gardner and with legislative counsel to craft the correct language.

Ms. Pierce's testimony also raises concerns about the proposed standards for portable air conditioners in H.410. In this case, AHAM and ASAP both want DOE to issue one of four federal energy efficiency standards completed under the Obama administration but withheld by the Trump administration since coming into office. The portable air conditioner standard in H.410 (and in similar bills in other states) is identical to the withheld federal standard. Including the standard in Vermont law will support legal efforts by the attorneys general of eleven states (including Vermont) to compel DOE to issue the withheld federal standard.

The court case against DOE remains active and AHAM initially opposed portable air conditioner standards in Vermont out of concern about potentially conflicting implementation schedules for state and federal standards, should both come into effect. AHAM and ASAP have worked out an agreement that keeps portable air conditioner standards in H.410 while addressing AHAM's concerns. ASAP agrees with the intent behind AHAM's proposed changes relevant to portable air conditioners and will work with Representatives McCormack and Gardner and with legislative counsel to draft an appropriate amendment to H.410.

### [NEMA Regarding high CRI fluorescent lamps](#)

The Senate Natural Resources and Energy Committee received written testimony dated March 19 from Mr. Kyle Pitsor, Vice President, Government Relations at NEMA. NEMA representatives and ASAP have had several telephone calls to discuss the issues raised in Mr. Pitsor's testimony.

H.410 would set Vermont energy efficiency standards for an outmoded and inefficient type of linear fluorescent tube, known as the "T12", which federal standards should have eliminated from the national

market years ago, but which continue to be sold due to a loophole in the standards. Mr. Pitsor's testimony claims -

*"If these T12 lamps cannot be sold in Vermont, residents will have no suitable replacements lamps for their fixtures; neither T8 fluorescent lamps nor linear LEDs (TLEDs) will work in the High CRI T12 fixtures due to the specific ballast that accommodates the High CRI T12s."*

On the contrary, at the Home Depot in Williston, VT ASAP has purchased "TLED" drop-in, linear fluorescent lamp replacements made by NEMA members Philips Lighting and Feit Electric. These TLEDs are marketed as "T12 LED replacement" (Philips Instantfit) and "T8/T12 replacement" (Feit Plug and Play). Mr. Pitsor's comments also ignore the fact that the inefficient and outmoded T12 fluorescent tubes carried by Home Depot, Lowes, Aubuchon Hardware, and many other Vermont retailers do not meet current federal energy efficiency standards.

On July 14, 2009 the DOE published a final rule in the Federal Register (74 FR 34080) setting energy efficiency standards for "general service fluorescent lamps", the common fluorescent tubes used in most businesses and homes across the country. DOE projected that these standards would save more than 1 trillion kilowatt hours cumulatively by 2045 — roughly equal to the annual electricity consumption of all homes in the U.S.

The 2009 federal fluorescent tube standards were the culmination of a lengthy DOE rulemaking process involving technology reviews, market research, and cost benefit analyses. NEMA, ASAP, and many others participated in this rulemaking and all parties understood that T12 fluorescent tubes would not be able to meet the 2009 standards. DOE's analysis for the rulemaking showed that the energy savings from eliminating T12 fluorescent tubes would outweigh the costs of switching to newer, more efficient lighting technologies. T12s have been around since WWII and are the oldest, least efficient kind of fluorescent lamp on the market. More efficient lighting technologies became available starting in the 1970s and by 2009 most large businesses had already switched away from T12s. This left homes and small businesses, which are traditionally slower to adopt new, energy efficient technologies, as the remaining T12 market.

Manufacturers were required to comply with the 2009 fluorescent tube standards starting in 2012, which meant that T12 tubes should have exited the market by the end of 2015 – but this did not happen. NEMA recently reported that in 2017 twelve percent of all new fluorescent tubes shipped in the U.S. were still T12s - over 60 million tubes. As far as ASAP is able to determine, none of these T12 fluorescent lamps meet the 2009 federal standards.

The loophole in the federal standard that allows continued T12 sales is based on Color Rendering Index, or "CRI", a quality metric used for fluorescent tubes measured on a scale of 1 (worst) to 100 (best). Fluorescent tubes with CRI 87 or higher used to be rare and expensive. Because the sales of these "high CRI" T12 fluorescent tubes used to be low, Congress excluded them from energy efficiency standards, inadvertently creating the loophole.

High CRI fluorescent tubes used to be a niche product, but not today. By 2015 many NEMA members including the big three lighting manufacturers; Philips, General Electric, and Sylvania; had introduced

low efficiency T12 fluorescent tubes at low prices, specifically designed to take advantage of the high CRI loophole. Most loophole T12s are over 40% less energy efficient than standards-compliant tubes and homeowners and small businesses disproportionately bear the cost of this wasted energy. NEMA claims that T12 sales are relatively small and dropping rapidly, but NEMA only reports data for its members and lighting manufacturers who are not NEMA members also supply loophole T12s to the U.S. market.

It is unlikely that DOE or Congress will do anything to fix the high CRI loophole in the federal fluorescent tube standards any time soon. However, H.410 and similar bills in other states can help close the loophole. If enough states take action, we can still help the federal fluorescent tube standards live up to their energy saving promise.

Sincerely,



Christopher Granda  
Senior Researcher/Advocate  
Appliance Standards Awareness Project (ASAP)  
P.O. Box 192  
Richmond, VT 05466  
(802) 922-7005