March 14, 2012

VIA REGULATIONS.GOV

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U.S. Department of Energy
Building Technologies Program
1000 Independence Ave., SW
Washington, DC 20585-0121

**Re: Framework Document, Energy Conservation Standards for Wine Chillers and Miscellaneous Refrigeration Products, EERE–2011–BT–STD– 0043, RIN 1904–AC51**

Dear Ms. Edwards:

This letter constitutes the comments of Earthjustice, Appliance Standards Awareness Project, and Natural Resources Defense Council in response to the framework document for energy conservation standards for wine chillers and miscellaneous refrigeration products. 77 Fed. Reg. 7547. We appreciate the opportunity to provide input to the Department.

**1) Scope of coverage**

We urge DOE to delay making a coverage determination under 42 U.S.C. § 6292(a)(20)—or a decision on terminology—until it determines whether the national energy consumption of a potential new product category is likely to meet the 4.2 billion kilowatt-hour per year statutory threshold required for the agency to be able to set standards. Though we believe this threshold is met in this instance, we want to ensure DOE avoids preempting existing California efficiency standards without being able to replace them with national standards.

When DOE does measure the national energy consumption of a potential new product category, we urge DOE to consider including all residential refrigeration products not currently covered.

**A. Compressor-based wine chillers**

The Framework Document fails to consider including wine chillers with integral compressors and condensers in a new category under § 6292(a)(20) based on a tentative conclusion that the statute bars DOE from doing so. That conclusion is incorrect.

The Framework Document states, for example, that wine chillers with integral compressors and condensers "satisfy the requirements of 42 U.S.C. § 6292(a)(1)," which extends coverage to refrigerators, with two exceptions. Framework Document, 6. DOE assumes that these wine

chillers are thus "already covered under EPCA" and that inclusion in a new category of covered products would not be "necessary or appropriate" as required by § 6292(b)(1)(A), and therefore is prohibited.

The problem with this analysis is that its first premise, which assumes all wine chillers are refrigerators, is wrong. Section 6292(a)(1)(B) ensures that all covered refrigerators under § 6292(a)(1) have integral compressors and condensers. It does not establish that all products with integral compressors and condensers are covered refrigerators.

The statute does not define the term "refrigerator." Given that silence, DOE's regulatory definition of the term is controlling. As DOE notes in the Framework Document, that definition excludes products—like residential wine chillers—that are not designed to get colder than 39 degrees Fahrenheit. 10 CFR § 430.2. Because compressor-based wine chillers are not designed for those temperatures, those products are not "refrigerators" for EPCA purposes. While DOE could change its regulatory definition after notice and comment, it cannot claim those products that are not "refrigerators" under EPCA are nevertheless "already covered" as refrigerators under EPCA. That would explain the fact that no manufacturer has ever challenged California's standards for wine chillers as preempted by EPCA coverage. Because those products aren't already covered, DOE should not rule out the possibility that their inclusion in a new product category under 42 U.S.C. § 6292(a)(20) might be "necessary or appropriate."

**B. Near-freezers**

Similarly, so-called near-freezers—while not statutorily excluded from coverage as freezers—are not covered under EPCA as freezers because the regulatory definition of freezers excludes refrigeration products that do not reach temperatures of 0° Fahrenheit. 10 C.F.R. § 430.2. DOE's authority to amend that definition to include near-freezers would not preclude DOE from instead exercising its authority to regulate those products as part of a new category under 42 U.S.C. § 6292(a)(20).

While near-freezers likely represent a small portion of the current residential refrigeration market, these products represent a potential loophole in the standards for residential refrigerators, refrigerator-freezers, and freezers since products that are designed to achieve temperatures that are between 0°F and 32°F are not covered by the current energy conservation standards. We encourage DOE to develop a framework to address products that are designed to achieve temperatures that fall between 0°F and 32°F to prevent any loopholes in the standards.

**C. Refrigerators with external compressors and condensers**

In addition, DOE should consider covering as part of a new category those residential refrigeration products that have compressors that may not be "an integral part of the cabinet assembly" as required by 42 U.S.C. 6292(a)(1)(B). As noted in comments the Appliance Standards Awareness Project and Earthjustice submitted on the proposed determination of

coverage, residential refrigeration products made by AGA Marvel and sold under the Northland brand name contain their compressor and condensing unit in a separate "power module" located outside the main body of the refrigerator. The power module creates cold air that is separately pumped into the refrigerator and freezer compartments. See, e.g., http://www.northlandnka.com/press/news-detail.asp?recid=30. Cooling the compartments in this way can require significantly more energy than is necessary in a conventional refrigerator, even after accounting for the additional storage capacity gained by moving the power module outside the cabinet. But such products may be excluded from coverage by 42 U.S.C. § 6292(a)(1)(B),[1] and thus from energy efficiency standards and labeling requirements applicable to competing products.

Though Northland products presumably represent a small portion of the overall market, they use a significant amount of energy per product. Moreover, as discussed at the public meeting, this technology is becoming increasingly common in the commercial market and other companies are likely to take advantage of this loophole and use this technology in their residential product lines.

**D. Hybrid products**

We encourage DOE to address hybrid products—products that combine wine storage compartments with refrigerator compartments and/or freezer compartments—as part of this rulemaking. While hybrid products may currently make up a relatively small portion of the residential refrigeration market, we expect that the market share of hybrid products will continue to grow.

We understand that there has been some confusion as to which types of hybrid products are currently covered by energy conservation standards and how these products should be tested. Establishing definitions, test procedures, and standards for hybrid products as part of this rulemaking should clarify the treatment of these products. In addition, since wine storage compartments are designed to maintain temperatures that are distinct from the typical compartment temperatures for residential refrigerators and freezers, addressing hybrid products will allow DOE to develop appropriate test procedures and standards for these products.

**E. Thermoelectric compact refrigerators**

We encourage DOE to consider covering thermoelectric compact refrigerators. Compressor-based compact refrigerators provide more reliable cooling than thermoelectric refrigerators.

[1] In order to definitively determine whether such a product is covered, DOE must interpret both the term "integral" and the term "cabinet assembly." Because, when assembled, the power module sits directly atop the other components, the Northland power module may be considered to form a continuous "cabinet assembly" with the other components. Because neither the statute nor DOE's implementing regulations nor any judicial decisions have defined that term, it appears to be an open question whether Northland products are already covered.

However, thermoelectric products are often the cheaper alternative. We are concerned that if thermoelectric compact refrigerators remain exempt from standards, there could be a market shift towards thermoelectric products, which would erode a portion of the saving from the standards for compressor-based compact refrigerators.

**F. Residential ice makers**

We believe that residential ice makers are becoming more common in homes. Walmart and Home Depot each offer for sale more than ten different models of "portable" ice makers. Significant reductions in energy use have been achieved for automatic commercial ice makers due to standards and programs such as ENERGY STAR. We encourage DOE to consider covering residential ice makers if these products represent a significant energy savings opportunity.

**2) Lighting**

At the DOE public meeting on February 22, stakeholders noted that some wine chillers are equipped with a light switch that gives the consumer the option of keeping the light on even when the door is closed. Stakeholders also noted that the Canadian test procedure for wine chillers tests products equipped with a light switch with the switch in both the on and off positions. We encourage DOE to capture the energy consumption of lighting in the test procedures for products equipped with a light switch. In addition, we urge DOE to include improved lighting efficacy as a technology option in the engineering analysis.

**3) Field data for energy use characterization**

We encourage DOE to incorporate in situ field measurements of wine chiller energy use into the energy use characterization. Field energy use for wine chillers will vary depending on ambient temperature and humidity, hours of operation, door openings, and other factors. In situ field measurements will help DOE develop estimates of field energy use, which is necessary for conducting the lifecycle cost, payback period, and national impact analyses.

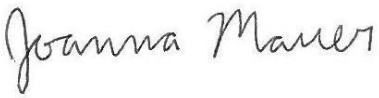
**4) Range of efficiency levels**

In the framework document, DOE stated that it would expect to analyze improved efficiency levels for wine chillers of up to 40% for automatic defrost products and up to 25% for manual defrost products. DOE must evaluate the maximum technologically feasible levels, which are not necessarily equivalent to the maximum efficiency levels of currently available products. We expect that for wine chillers, the maximum technologically feasible levels would exceed the efficiency levels of currently available products. In the recent residential refrigerator rulemaking, DOE used energy modeling to develop the maximum technology levels based on the use of all design options applicable for each specific product class. We encourage DOE to take a similar approach to develop the maximum technology levels in this rulemaking.

Thank you for considering these comments.

Sincerely,

Jonathan Wiener
Associate Attorney
Earthjustice



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