U.S. Environmental Protection Agency

EPA Docket Center

Attention: Docket ID No.

1200 Pennsylvania Ave, NW

Washington, DC 20460


RIN: 2060-AS51

Dear Mr. Luke Hall-Jordan:

On November 9, 2015, the Environmental Protection Agency (EPA or Agency) published in the Federal Register for comment a Proposed Rule, “Update to the Refrigerant Management Requirements Under the Clean Air Act” (the “Proposed Rule”).

While the Food Marketing Institute (FMI)\(^1\) fully supports EPA’s efforts to reduce emissions of ozone-depleting substances and gases with high global warming potential (GWPs), we have a number of concerns with the Proposed Rule and the impact it will have on the supermarket industry. FMI urges the Agency to consider the comments below to ensure a Final Rule meets the Agency’s objective without imposing unnecessary and overly burdensome requirements on food retailers. FMI appreciates the opportunity to respond to the request of EPA for comments on the Proposed Rule.

Under the Proposed Rule, EPA has made clear their intent to protect both the stratospheric ozone layer by reducing emissions of ozone-depleting substances (ODSs) and to protect the climate system by reducing the emissions of those substitute refrigerants with high GWPs. EPA also emphasizes the importance of taking proactive measures to break the cycle of continuous repair and recharge of high-leaking appliances. Perhaps the most notable aspect of the Proposed Rule is

\(^1\) Food Marketing Institute proudly advocates on behalf of the food retail industry. FMI’s U.S. members operate nearly 40,000 retail food stores and 25,000 pharmacies, representing a combined annual sales volume of almost $770 billion. Through programs in public affairs, food safety, research, education and industry relations, FMI offers resources and provides valuable benefits to more than 1,225 food retail and wholesale member companies in the United States and around the world. FMI membership covers the spectrum of diverse venues where food is sold, including single owner grocery stores, large multi-store supermarket chains and mixed retail stores. For more information, visit [www.fmi.org](http://www.fmi.org) and for information regarding the FMI foundation, visit [www.fmifoundation.org](http://www.fmifoundation.org).
to extend existing requirements to their non-ODS substitutes in part to reduce emissions of greenhouse gases (GHG). The Proposed Rule is the latest in EPA's recent series of rulemakings designed to reduce emissions of hydrofluorocarbons (HFCs) in response to President Obama's June 2013 Climate Action Plan and specifically one of the Plan's goals of reducing HFC emission.

The Proposed Rule also includes a number of additional changes, both large and small, to the rules governing the refrigeration management requirements under the Clean Air Act, including: extending the restrictions on sales of ODS refrigerants (which are limited to certified technicians) to non-ODS refrigerants; new recordkeeping requirements for refrigerant recovered during system disposal; updates to the technician certification program; new requirements relating to the evacuation of refrigerants; new calculation methods for full charges due to seasonal variations, and for methodologies to determine leak rates; new service record documentation and record-keeping requirements for technicians who service appliances.

While the cost is significant, FMI members support a number of proposed changes to the existing regulations for which economic factors have been properly considered, and acknowledges that many of these proposed requirements are already included as part of best practice refrigerant management, at a significant cost, within the supermarket industry. Specifically, FMI supports the extension of the rule to cover high GWP HFC refrigerants. FMI members also agree that a slight lowering of the applicable leak rate from 35% may be warranted, however a reduction to 20% for commercial refrigeration appliances and 10% for comfort cooling appliances is overly burdensome for small businesses and independent retailers. FMI members also support the requirement for a follow-up verification test, and agree that some proposed requirements for a leak inspection of the visible and accessible components of an appliance may be warranted when that appliance has exceeded the applicable leak rate.

However, FMI members have serious concerns with a number of provisions in the Proposed Rule. For the reasons stated below, FMI members strongly oppose the proposed quarterly leak inspections and the two-year leak limit. Requiring a quarterly leak inspection will impose significant costs on the industry and consider this as largely redundant given the proposed leak inspection requirements. Additionally, as proposed, the two-year leak limit will impose an excessive and unwarranted cost on the industry and will result in significant waste causing supermarkets to dispose of perfectly good equipment with little corresponding benefit to the environment.

Cost of Compliance

For the following reasons, the retail industry strongly urges EPA to reconsider the incredible cost and burdens the Proposed Rule will impose on the retail industry. FMI does not believe the burdensome and redundant requirements will help achieve their objective and urges the Agency to reconsider the costs of the proposal and consider the alternatives presented herein to reduce
the regulatory burden on industry while achieving the goals of the Proposed Rule. In Executive Order 13563, President Obama ordered that: Our regulatory system . . . must identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends. . . As stated in (Executive Order 12866) . . . each agency must ... propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs. . . (and) tailor its regulations to impose the least burden on society. EPA has additional obligations to consider less burdensome regulatory alternatives. In addition, EPA is required to consider the impact of the Proposed Rule on small businesses and assess less burdensome alternatives pursuant to the Regulatory Flexibility Act (RFA). As explained later, the Proposed Rule will have a very significant impact on thousands of small business grocers, costing them hundreds or thousands of more dollars per repair. There appear to be opportunities to reduce regulatory burden and costs of the proposal while still achieving the majority of the environmental benefits. For example, the requirement to address leaks in a timely manner will provide assurances that leaks are addressed promptly, which eliminates the need for redundant quarterly leak inspections.

The Supermarket Appliance

The important areas of comment by FMI are on those rules whose application to a typical supermarket appliance generally fails the test of economic burden balanced by environmental benefit. To properly understand the impact of these rules on a supermarket owner/operator it is necessary to recognize that a typical supermarket appliance is a field-erected system comprised of multiple major custom-built components that are located remotely from one another and interconnected to form a complete refrigerant circuit. For the sake of providing for both energy efficient operation and minimum refrigerant charge, a supermarket appliance will connect multiple refrigerated display fixtures, other evaporators, condensers and compressors on a common piping loop. To maximize the benefits of energy efficiency and low refrigerant charge, some stores are designed with all of its refrigeration components connected as a single appliance. Given the design of a supermarket appliance the most significant concerns for the supermarket owner/operator are associated with the leak inspection requirements of paragraphs 82.157(b), the leak repair requirements of paragraph 82.157(e), and the two-year leak limit of paragraph 82.157(j) for the reasons stated below.

Proposed Changes to the Leak Inspection and Repair Requirements

The most significant changes in the Proposed Rule involve measures to strengthen the provisions that relate to the detection, repair and maintenance of leaks in refrigeration systems. EPA claims that its proposed requirements track the performance of the lowest-emitting equipment and industry best practices under conditions in the field. The Agency also states that the proposal is, in part, modeled after provisions in the voluntary GreenChill Program. The retail associations believe that voluntary partnerships like GreenChill and the implementation of industry best practices are achieving many of the goals EPA seeks to attain in the Proposed Rule. We believe that these means, rather than burdensome regulations, are the way to move forward in continuing to reduce the emissions of ozone-depleting substances (ODS) and substitute refrigerants. The associations also urge EPA to consider and acknowledge that modeling the proposed
requirements on the GreenChill program does not take into consideration the impact of the proposals on independent operators or small businesses. The focus and economic analysis in the Proposed Rule is modeled after performance of the lowest-emitting equipment and fails to take into account the impact of the Proposed Rule on small businesses and independent operators. As noted above, EPA has an obligation to consider the disparate impact this rule would have on small businesses and must consider the least burdensome alternatives to achieving their goal.

**FMI Members Strongly Oppose the Two Year Leak Limit**

In the Proposed Rule, EPA states that “appliances” that contain greater than 50 pounds of refrigerant will be prohibited from operation if they leak more than 75% of the appliance’s full charge in any two consecutive 12-month periods. This provision will require that operators “retire” -- i.e., remove from service and disassemble, rather than repair or retrofit -- any system that exceeds that two-year threshold.

FMI members strongly oppose the proposed two-year leak limit and urge the Agency to consider a less burdensome alternative. The proposed two-year leak limit provision is overly prescriptive and would result in the replacement of perfectly working components in good condition with many years of remaining service life. We also believe that the application of a two-year leak limit to a supermarket appliance would be profoundly wasteful and largely ineffective in achieving the intended benefit of reduced refrigerant emissions. There are many circumstances under which a supermarket appliance could exceed the proposed two-year leak limit, but virtually no circumstance for which the requirement to retire the full appliance would be a reasonable measure.

In requiring the retirement of an appliance that exceeds a proposed two-year leak limit, FMI believes that EPA has not properly considered the nature of a typical supermarket appliance. The requirement to fully retire a supermarket appliance would capture serviceable and fully functional components that are not leaking and may have no prior leak history. Not only do these components represent valuable assets to the owner or operator, but the replacement of these components presents the potential for new leaks where none previously existed. Furthermore, leaking components in a supermarket appliance can be readily isolated from the non-leaking components, and they can be retired more cost effectively than the cost to retire the appliance as a whole. In sum, if EPA adopts the two-year leak limit as proposed will impose unnecessary costs on the retail industry. The logic applied in the Proposed Rule would be the equivalent to requiring an owner of a brand new car to destroy and replace the entire vehicle if the car encounters 2 flat tires within any two consecutive 12-month periods.

**The Two-Year Leak Limit Will Impose Unjustifiable Costs on the Supermarket Owner/Operator and Put Small Retailers Out of Business**

Supermarkets tend to be remodeled multiple times within the service life of some of the components in an appliance. Therefore, a supermarket appliance is often comprised of components of varying age, varying leak histories, and varying vulnerabilities to future leakage.
For the sake of minimizing the total refrigerant charge and energy consumption, some supermarkets are designed with all merchandising fixtures, compressors and condensers connected as a single appliance. The proposed two-year leak limit would impose greater risk on the owner/operator of such a system, and therefore discourage them from pursuing the environmental benefits of such a system.

When a supermarket is designed to operate with a single appliance, the cost to replace that one appliance can easily exceed three million dollars. Even in a supermarket that operates with multiple appliances, the cost to replace one full appliance can easily exceed one million dollars. Imposing these unnecessary costs would be even more burdensome and catastrophic for the small business owner. For small independent operators the alternative to replacing a million dollar appliance would be to go out of business entirely.

Furthermore, the leak inspection and leak repair requirements are designed to address the issue of high leaking appliances that may have been maintained under the old rule through a continuous cycle of repair and recharge. To the extent that these sections already address the ‘chronic leaker’ issue, the two-year leak limit is largely redundant. Also, the extent to which a two-year leak limit would apply to those owners/operators not in compliance with the leak inspection and leak repair requirements, this two-year leak limit would be no more effective in encouraging compliance. The two-year leak limit would tend to capture only those appliances that had some combination of leak incidents that, when promptly repaired, are not indicative of the general state of repair of the appliance, instead of those appliances in a state of disrepair because leaks are not promptly identified and repaired. Clearly, the proposed leak limit does not satisfy the implied objective stated in the preamble to “maximize the environmental benefit for the implementation effort required”. FMI also questions the economic impact and believes that the costs of the proposal will be significantly higher than EPA estimates. FMI strongly urges the Agency to reconsider the two-year leak limit as proposed.

Additionally, the qualifying event for failing the two-year leak limit could simply be the passage of time. For example, consider two 75% leaks that occur six months apart. At the time of the second leak, the appliance has not yet failed the two-year limit. However, on the anniversary date of the first leak, the appliance will be out of compliance with 75% leaks in two consecutive twelve month periods. This leaves the “two consecutive twelve-month periods” qualification not only unnecessary, but also vague and difficult to monitor for the owner/operator.

EPA also seeks comment on whether the period, whether six months or twelve months, should be aligned with the calendar year. FMI believes that the alternate proposal to align the leak limit with the calendar year is arbitrary. For example, two 75% leaks that occur six months apart within the same calendar year would not fail the two-year limit, but two 75% leaks that occur six months apart and straddle the date of January 1 would fail.

FMI strongly urges the Agency to eliminate the incredibly burdensome and wasteful two-year leak limit requirement. However, in the event EPA decides to move forward, we would propose an alternative requirement to only retire or mothball those components that are contributing to
on-going leakage in an appliance that has exceeded the two-year leak limit. Although FMI notes the same concerns with this alternate proposal in terms of redundancy with leak repair requirements, ineffectiveness in encouraging compliance and the arbitrariness of timing for qualifying events.

Further, FMI also seeks clarification on the terms “all leaks” and “all identified leaks”. For example, a typical supermarket appliance will contain hundreds of components that rely on gaskets, O-rings and threaded fittings to provide an effective, but imperfect, seal. As EPA acknowledges in its preamble, even those components that are in good repair can have a very low level of leakage or permeability that can be detected in a leak inspection. Such leaks are often not repairable, and the cost to retire such a component would be well in excess of any environmental benefit derived.

As suggested by EPA in the preamble, the requirement to repair all identified leaks should allow for the application of sound professional judgement as to whether or not the identified leak is the result of a faulty component. Therefore, FMI recommends that an exception to the appliance repair requirements of 82.157(e)(2) be allowed as follows:

All leaks must be identified and repaired . . . within 30 days . . . of an appliance exceeding the applicable leak rate . . . except when a low level leak has been detected at a component in an appliance, and when sound professional judgement indicates that the detected leak is not the result of a faulty component and that an attempted repair would not eliminate or reduce the leakage.

**Alternatives to Leak Inspections that are Equally Protective of the Environment**

We consider the requirement for a quarterly leak inspection to be wasteful and largely redundant with the requirement to perform a leak inspection on each occasion that an appliance exceeds the applicable leak rate. The greatest value comes from performing a leak inspection on systems that have a known leak, and on requiring a comprehensive leak inspection as prescribed in the Proposed Rule to assure that the service technician does not stop an inspection when the first leak is found. FMI members note that redundant quarterly leak inspections would impose additional annual costs of $2,000 to $8,000 per store, imposing a burden that greatly exceeds the benefit achieved.

FMI strongly urges EPA to reconsider the proposed quarterly leak inspections. Should EPA move forward with new leak inspection requirements, FMI proposes that EPA consider the same leak inspection requirement on appliances with a full charge of 500 pounds or more as would be imposed on appliances with a full charge of 50 or more pounds but less than 500 pounds. FMI believes that this alternate proposal would improve the clarity, uniformity and implementation of the regulation by imposing the same leak inspection requirement on all appliances with a full charge of 50 pounds or more. Applying FMI’s proposed alternate requirements for leak inspections presented below, the cost of an annual leak inspection of all appliances in a store...
would be expected to be much lower. The performance of this leak inspection on a quarterly basis for a supermarket company with 500 locations would have a cost in the range of two or upwards of four million dollars per year.

Furthermore, FMI proposes that EPA extend the exemption from the leak inspection requirement for appliances that are continuously monitored by an automatic leak detection system to include those appliances that have a component (most commonly an air-cooled condenser) located outside the enclosed building or structure. This exemption would be extended only when an annual leak inspection is performed on those components located outside the enclosed building or structure.

FMI believes that extending this exemption as described would maintain the incentive for an owner/operator of a refrigeration appliance to employ automatic leak detection. To not extend this exemption to appliances that have a component located outside the enclosed building or structure would disallow the exemption for the vast majority of supermarkets. The likely result of this is that many supermarket owners/operators forgo the costs of both ‘belts and suspenders’ (i.e. the cost of both quarterly or annual leak inspections and automatic leak detection systems), resulting in fewer supermarkets that employ automatic leak detection systems.

In sum, EPA should consider an alternative whereby commercial refrigeration and industrial process refrigeration equipment with a charge of 50 pounds or more of refrigerant must be inspected for leaks once per year. Also, any annual leak inspections should not required on those components or sections of an appliance that are located inside an enclosed building or structure and are continuously monitored by an automatic leak detection system that is audited and calibrated annually. An automatic leak detection system may directly detect refrigerant in air, monitor it’s surrounding in a manner other than detecting refrigerant concentrations in air, or monitor conditions of the appliance. Those components or sections of an appliance that are located outside an enclosed building or structure would be required to have an annual leak inspection.

FMI also seeks clarification on the definition of leak inspection and what the Agency means by ‘visible’ in the phrase “examination of all visible components of an appliance”. It is common for a supermarket building to have an exposed structure. That is, built without a ceiling so that the roof and structural elements of the building are visible from the sales floor. To access visible components that are installed overhead near the roof level would require the use of a high lift, would often require more than one technician, and would need to be performed during an unoccupied time of store operations. For the owner / operator of a supermarket appliance, the requirement to perform an examination of all visible components in an exposed structure building every three months and on every occasion of an appliance exceeding the applicable leak rate is unduly burdensome.

Given the extensive nature of a supermarket appliance, and the effort required to access all visible components, a single leak inspection could cost in the range of $2000 to $8000 per store.
Under the Proposed Rule, this effort and cost would be imposed even when the source of a leak may be readily evident and accessible. Furthermore, the vast majority of the components of an appliance, and those most prone to refrigerant leakage, are accessible directly from floor or roof level.

To better align the cost of a leak inspection with the expected environmental benefit, FMI suggests a proposed alternate definition of Leak Inspection to read as follows:

*Leak inspection means the examination of all components of an appliance located either inside or outside an enclosed building or structure that are visible and accessible without the use of equipment from floor or roof level and located outside of any confined space, using a calibrated leak detection device, a bubble test, or visual inspection for oil residue in order to determine the presence and location of refrigerant leaks.*

**Other Revisions to the Leak Repair Proposed Regulations**

**Appendix A**

- Section 2.1.4: R-449A is misidentified as R-49A in the list of zeotropic blend refrigerants

**Effective Date**

EPA indicates that they are seeking comment on an 18-month implementation date following publication of a Final Rule. FMI urges EPA to consider the significant costs and impact the Proposed Rule will have on the supermarket industry. As such, FMI urges that Agency to provide adequate time for the supermarket industry to understand and implement new procedures to comply with the Final Rule. FMI members indicate that a two and a half year implementation date would decrease the costs of compliance under the Final Rule and will give companies adequate time to train employees and update current systems consistent with a Final Rule. The Retail Industry Leaders Association (“RILA”), the Food Marketing Institute (“FMI”) are pleased to submit these comments on behalf of their respective members. We appreciate the opportunity to submit comments and look forward to working with the Agency.

Please don’t hesitate to contact us with any questions at sbarnes@fmi.org or 616-405-3106

Sincerely,

Stephanie K. Barnes
Regulatory Counsel
Food Marketing Institute

Susan Pifer
Vice President, Compliance
Retail Industry Leaders Association