



January 25, 2016

Via Electronic Submittal to <http://www.regulations.gov>

Stratospheric Protection Division
Office of Atmospheric Programs
Mail Code 6205T
1200 Pennsylvania Avenue NW
Washington, DC 20460

Attention Docket ID No. EPA-HQ-OAR-2015-0453

Re: Comments of the Environmental, Health & Safety Communications Panel on the Protection of Stratospheric Ozone: Update to the Refrigerant Management Requirements under the Clean Air Act Proposed Rule

To Whom It May Concern:

The Environmental, Health & Safety Communications Panel ("EHSCP" or "we")¹ is pleased to provide comments in response to the Environmental Protection Agency's ("EPA" or "Agency") proposed rule referenced above, as published on November 9, 2015 (80 Fed. Reg. 69458) as amended on December 17, 2015 (80 Fed. Reg. 78705). Comments must be received by EPA on or before January 25, 2016.

The EHSCP is a consortium of communications environmental, health, and safety professionals dedicated to promoting employee safety and health, and environmental responsibility throughout the communications industry. The EHSCP strives to provide constructive input in the development and implementation of environmental, health and safety standards and guidelines that affect the varied businesses within the communications industry. As such, the panel maintains an active advocacy role, providing comments and recommendations to federal and state agencies when issues concern the communications industry. It is in this capacity that the EHSCP is submitting these comments. More information regarding the EHSCP may be found at www.ehscp.org.

EHSCP members utilize refrigeration equipment for comfort cooling and are subject to applicable portions of the Refrigerant Management Requirements. We appreciate EPA's efforts to update and improve its Refrigerant Management Requirements relative to Stratospheric Ozone Protection. We particularly support four elements in the proposed rule:

¹ The EHSCP member companies include Alcatel-Lucent, AT&T, Bell, CenturyLink, Comcast, Crown Castle, Ericsson, Leducor Technical Services, Level 3 Communications, Sprint, Verizon, and Windstream Communications.

- We agree with the Agency that it is necessary to close the loophole requiring purging of devices with refrigerant charges between 5-50 lbs. We believe the proposed rules effectively accomplish that objective.
- We appreciate the Agency's efforts to provide clear apportionment of responsibility and accountability. We particularly support the requirement for those servicing refrigerating devices to provide the technical information (e.g., annual leak rate calculations) that the owner/operator of the device is required to maintain and act on.
- We believe that the proposed language regarding testing of system repairs is appropriate. The combination of two tests, one performed after repair and before the system is recharged and a second once the appliance has reached "normal operating characteristics and conditions" provides effective confirmation of repair. It appropriately focuses on assuring that verification tests are done on a timely basis and eliminates the arbitrary time delays between tests from the December 15, 2010, proposal and the resultant added costs.
- We also support EPA's proposed changes to require electronic reporting and to allow and encourage electronic recordkeeping, so long as those records are readily accessible. We believe records often are most effectively maintained in a central repository and can be made available within a reasonable time period upon request.

Although we support many aspects of the proposed rule, we recommend revisions to a few aspects of the proposed rule to prevent unnecessarily increasing operational and administrative burdens to operators of comfort cooling systems without providing a commensurate environmental benefit. These comments are provided below.

I. Leak Rate – The Allowable Leak Threshold for Comfort Cooling Units Should Not Be Reduced from 15% to 10%

A. Data used as the basis for the proposed rule do not adequately represent similarly regulated comfort cooling units nationwide

EPA's current rule sets a permissible annual leak rate of 15% for comfort cooling systems. Exceedance of this threshold triggers the requirement for repair and retesting of the system within the prescribed time frame. EPA believes that this threshold is too high based upon data collected from three regulatory programs currently in practice. The three programs cited by EPA in support of a suggested decrease in the acceptable leak rate to 10% include:

- EPA's "Green Chill" Partnership, a partnership with **food retailers** to reduce refrigerant emissions and decrease their impact on the ozone layer and climate change;
- California Air Resources Control Board's (CARB's) Refrigerant Management Program (RMP), a program to reduce refrigerant leaks from **large commercial and industrial refrigeration systems** to reduce the emissions of high global warming potential refrigerants; and
- South Coast Air Quality Management District's (SCAQMD's) Rule 1415 program to reduce ozone-depleting refrigerant emissions from stationary, non-residential air conditioning (comfort cooling) and refrigeration systems with full charge capacity of greater than 50 pounds, and using Class I and Class II refrigerants.

Data from the first two programs are limited to large commercial refrigeration equipment, which are very different from comfort cooling systems. Comfort cooling systems have extensive

distribution loops which may contribute to small losses of refrigerant over time. Comfort cooling systems also tend to cycle less frequently and are designed to different standards than large commercial refrigeration systems.

Data collected from SCAQMD's Rule 1415 program (2700 units, per EPA), while including comfort cooling within its jurisdiction, represents a very limited geographical area. As this program has been in place since 1991, its rules, regulations, guidance and enforcement has had the effect of improving maintenance routines and driving equipment replacement thus creating a population of better maintained and/or newer equipment which by design have reduced leak rates and are not representative of systems necessarily used in other geographical areas.

As a consequence the application of leak test results from these three sources as the basis for a more stringent leak rate is inappropriate. Therefore, these studies cannot be used as suggested by EPA, as the basis for a determination that the financial impact of lowering the leak rate threshold will not be significant. To that end we feel strongly that the leak rate threshold for comfort cooling systems should remain at 15%.

B. Current annual leak thresholds and related repair requirements are effectively reducing emissions of Ozone Depleting Substances (ODS)

The scientific consensus is that current commitments and controls are on target and effectively reducing tropospheric ODC concentrations. The most comprehensive scientific information on ozone depletion comes from the World Meteorological Organization's Global Ozone Research and Monitoring Project. This effort is jointly sponsored by the World Meteorological Organization (WMO), United Nations Environment Programme (UNEP), the National Oceanic and Atmospheric Administration, The National Aeronautics and Space Administration, and the European Commission.

Findings of the WMO/UNEP's most recent Scientific Assessment for Decision-Makers (2014)² included:

- "Actions taken under the Montreal Protocol have led to decreases in the atmospheric abundance of controlled ozone-depleting substances (ODSs), and are enabling the return of the ozone layer toward 1980 levels."
- "The sum of the measured tropospheric abundances of substances controlled under the Montreal Protocol continues to decrease. **Most of the major controlled ODSs are decreasing largely as projected . . .**"
- "Total column ozone will recover toward the 1980 benchmark levels over most of the globe under full compliance with the Montreal Protocol. This **recovery is expected to occur before midcentury in midlatitudes** and the Arctic, and somewhat later for the Antarctic ozone hole."
- "The cumulative effect of [total] elimination of emissions from all banks and production [of ODSs would] advance this return by [only] 11 years." (i.e., **even total elimination of these substances would only accelerate recovery by 1/3.**)

Reducing the leak rate from 15 to 10% would not significantly contribute to the recovery of the ozone layer. Unless EPA can document a need for further reductions, we see no reason to add burden of increased regulation.

² <http://www.esrl.noaa.gov/csd/assessments/ozone/>

II. The Two-year Leak Limit – EHSCP Suggestions for Alternate Time Frame and Addition of Consideration for Catastrophic Events

The proposed rule would add a requirement that, if “more than 75 percent of the full charge” of any appliance is released “in each of two consecutive twelve month periods”, the appliance must be taken out of service and retired. EPA requests comments on the appropriate periods in which such leaks might occur and the advisability of an allowance for unavoidable catastrophic releases. We agree that these are both important questions and that the answers dictate that time frames be clearly defined and that reasonable allowances be made for catastrophic events. Our suggestions are provided below.

A. Time frames

The selected time frames must establish clearly definable start and end dates. They must also be sufficiently long such that they do not inadvertently capture a leak repair attempt that passed the initial verification test but failed the second verification test shortly thereafter, if the period between initial and follow-up happened to span two timeframes. Calendar years are inappropriate because such a system can lead to inappropriate results. For example, leaks on December 31 and January 1, one day apart, would be in consecutive calendar years while leaks on January 1 and December 31, 364 days apart, would not.

Moreover, calendar years are not aligned with leak rate calculations which, by definition at §82.152 are “measured between refrigerant charges”. This begs the question whether a leak of 75% that occurs at some point between July of 2016 and June of 2017 occurred in calendar year 2016 or 2017.

We recommend that the timeframe should be a defined period starting on the date the first leak is discovered and that the concept of calendar years not be used for determining appropriate actions.

B. Catastrophic releases

While we believe such cases will be rare, we believe the rules should make some allowance for catastrophic releases. There are numerous potential causes of such a release and appropriate responses to each may vary. As just a few examples:

- for damage caused by earthquake, storm or other natural disaster, the appropriate response may be to inspect the system to assure that it has no residual damage;
- for damage caused inadvertently during equipment servicing, the appropriate response may be to reassess the reasons for the release and retaining a qualified vendor with additional expertise; and
- for damage caused by impacts upon equipment (e.g. condenser coils, compressor or piping) such as from vehicle accidents or other unanticipated on-site conditions, the appropriate response may be to provide additional physical protection, including devices such as bollards or pylons.

Additionally, a system could have two large volume leaks from unrelated components, each of which can be effectively repaired or individually replaced. It is unnecessary and detrimental from both an economic and environmental perspective to require the retirement and replacement of units that can, following repair, continue functioning efficiently and in compliance with the rule for many years to come.

We believe that such issues would be best managed on a case-by-case basis. Appropriate notification to the EPA would include:

- a description of the nature and cause of the releases;
- a description of any repairs made; and
- identification of any changes made to avoid such releases in the future.

This would allow the Agency to assure that failing systems are retired but avoid excessive cost in replacing expensive compliant systems that are still in good operating condition but are befallen by unexpected or unanticipated events.

III. EHSCP Suggests Clarification is Needed for Equipment with Multiple Refrigeration Circuits

Throughout the proposal, EPA states that the leak repair requirements apply to appliances containing 50 or more pounds of refrigerant. However, some appliances have more than one refrigerant circuit. With regard to commercial refrigeration, EPA clarified in the Federal Register preamble of August 8, 1995 at 60 FR 40425 that it intended each independent circuit was to be considered separately. In interpretations, the Agency has applied this same interpretation to comfort cooling.

We request the EPA clarify that for units with multiple refrigeration circuits, the quantity of refrigerant contained in an appliance is based on the quantity contained within each independent refrigeration circuit not on the aggregate of the system. For clarity, we recommend that this interpretation be codified in the definition of "appliance" at 40 CFR 82.152. For example:

Appliance means any device which contains and uses a class I or class II substance or substitute as a refrigerant and which is used for household or commercial purposes, including any air conditioner, motor vehicle air conditioner, refrigerator, chiller, or freezer. **For a device with multiple circuits, each independent circuit shall be considered a separate appliance.**

EHSCP appreciates EPA's efforts to update and improve its Refrigerant Management Requirements and the opportunity to provide comments. Please contact me if you need additional information or would like to discuss our comments further.

Sincerely,



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