



U.S. CONSUMER PRODUCT SAFETY COMMISSION  
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Mr. Joseph R. Musso  
Chair for STP 2158  
Underwriters Laboratories Inc.  
333 Pfingsten Road  
Northbrook, IL 60062

Dear Mr. Musso:

In June 2011, U.S. Consumer Product Safety Commission (CPSC) staff completed a report on *An Evaluation of Using Indicators to Inform Consumers of Clothes Dryer Status*, (<http://www.cpsc.gov/LIBRARY/FOIA/FOIA11/os/clothesdryerindicator.pdf>). Based upon the information provided in that report, CPSC staff is requesting that Underwriters Laboratories (UL) 2158 Standards Technical Panel (STP) form a task group to develop performance requirements to provide feedback to the user when a clothes dryer is operating under abnormal conditions.<sup>1</sup> An abnormal condition could occur without the user's knowledge, for example, when the dryer is cycling the high-limit control to prevent an overheated condition. Dryer status feedback could inform the user that the dryer requires maintenance, and action could be taken to prevent a hazardous scenario.

CPSC staff estimates that from 2006 to 2008, there was an annual average of 7,000 residential structure fires attributed to clothes dryers. During that time period, the estimated annual average of dryer fire injuries was 230. The estimated annual average of fire deaths during this timeframe was less than 10.

CPSC staff is very encouraged by the fire containment performance tests in 19.6 and 19.7 of UL 2158. These tests appear to represent a significant, positive step toward reducing the severity of, and injuries associated with, dryer fires. However, CPSC staff believes that an additional step can be taken to prevent fires from developing, namely, informing users that a dryer is operating abnormally and that it requires maintenance.

Currently, UL 2158 does not require clothes dryers to provide feedback to users on the "health" of the dryer. Accordingly, without the user's knowledge, a clothes dryer could be operating in a potentially unsafe mode, for an extended period of time, with the potential to escalate into a hazardous fire condition. Status indicators, whether visual and/or audible, could be useful tools for informing a user that a clothes dryer is not operating correctly or that a routine maintenance task needs to be performed.

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<sup>1</sup> The views expressed in this letter are those of CPSC staff, and they have not been reviewed or approved by, and may not necessarily reflect, the views of the Commission.

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Consumers report that they usually clean their clothes dryer lint filters; however, they also report that they typically do not clean the ducting or inside of the dryer cabinet. The failure to clean ducts and airways is among the leading factors associated with clothes dryer fires. Lint can accumulate inside a dryer, even when the dryer's lint screen has been cleaned after each use and the dryer is properly exhausted. Lint that accumulates inside the dryer cabinet and comes into contact with the heater can potentially lead to a fire.

As indicated in the June 2011 CPSC staff report, the type and sophistication of sensor/indicators may vary widely and provide a continuum of protection to the user from simple "reminder" lights, based on a time-of-use counter, to actual error codes/messaging, based on the status of temperature regulating/limiting devices. Maintenance indicators could be used to remind consumers to clean inside the dryer chassis and dryer duct. Counting dryer loads is one easy method that can be translated to an indicator to remind consumers when a task needs to be performed—check and clean the exhaust exit, exhaust duct, and inside the dryer cabinet.

An "abnormal operations" indicator could provide consumers with information about a potentially hazardous condition. Normally, clothes that do not dry may be the only indication to a consumer that a dryer is not operating correctly. The dryer can enter into a high-limit cycling mode due to a number of conditions, including: dryer overload; a blocked exhaust duct; or a blocked lint screen. Feedback on the status of the high-limit thermostat would be a valuable indicator that service of the dryer system is necessary.

CPSC staff believes that the development of specific monitoring and indicating requirements for inclusion in UL 2158 would benefit substantially from the collective contributions of a task group. For example, the specific number of times a dryer can run before a check and cleaning task should be performed would be manufacturer- and dryer-design specific. A task group that included representation of interested parties would be instrumental in developing optimal draft proposed language.

Staff of the U.S. Consumer Product Safety Commission (CPSC) appreciates the opportunity to initiate action that may result in a recommendation to revise UL 2158 *Standard for Electric Clothes Dryers*. CPSC staff believes that using indicators to inform consumers that maintenance and service of the clothes dryer are required potentially can reduce the number of fire-related incidents involving clothes dryers. We look forward to participating in further discussions on this subject.

Sincerely,



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