



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

November 2, 2010

Via U.S. Mail and E-mail

Mr. David Roberts
Vice President
Norcold, Inc.
600 S. Kuther Road
Sidney, OH 45365

NVS-215/jtt
10E-049

Subject: Safety Recall 10E-049 (Refrigerator Fires)

Dear Mr. Roberts:

Several weeks ago we acknowledged receipt of Norcold, Inc.'s notification to NHTSA of a safety defect in certain of its refrigerator products installed in various recreational vehicles (RVs). In our acknowledgment, among other things, we reminded Norcold of its reporting and notification obligations pursuant to Federal law. We also notified the company that the information in its defect report did not satisfy the requirements of 49 CFR 573.6. Specifically, the report was missing the required chronology of principle events that were the basis for its defect decision, including a summary of all warranty claims, field or service reports, and other information, with their respective dates of receipt. We requested this information be provided as soon as possible.

A few days ago you provided a chronology that said, "[i]n June 2010, Norcold observed that our claim experience from units produced since 2003 was approaching approximately .1% (.08%) of the total population." Although this information does provide information, it does not provide the information required by the regulation. We request again that your company provide a chronology that, at a minimum, meets the requirement. We note that in a telephone call you made several weeks ago to RMD staff, you indicated there had been several fire events, yet there is no mention of these in the chronology or elsewhere. Please describe the events, including an identification of the dates of the events and Norcold's first receipt of information or claims related to them.

Given that there have been numerous production changes, remedial fixes, and safety recalls to correct against the risk of leaking coolant from Norcold's 1200 series refrigerators over the years, at this time we would also like to confirm that our understanding of the history accompanying Norcold's identification of the various defects and its efforts to remediate them is accurate. Following below is a summary of our understanding:

Production Chronology

Build dates 1996 -1999:

Series 1200 fridges currently have two heating elements housed in two sleeves that are welded saddle style over the burner tube. From 1996 to 1999 the sleeves were welded together as one big heater pocket that turned out to be susceptible to fatigue cracking.

Build dates 1999 -2001:

Norcold changed their weld configuration after 1999 to separate the heater sleeves better allowing the metal to expand between welds. These welds were done robotically with a horizontal process.

Build dates 2001-2002:

In March 2001, Norcold changed the weld process from horizontal to vertical to address weld strength issues.

Build dates 2003-current:

Norcold added an algorithm to the system that would shut the cooling unit down when leaks were inferred. Algorithm looks at cooling temps at the blower fan. If after several cycles of demanded cooling the box is below a threshold the boiler is shut down.

Build dates 2005-2010:

A thermal switch is pop-riveted on to a collar around the burner tube. High temps will trigger a system shutdown.

Build dates 2010-current:

In some tested cases the switch was unable to identify overheats fast enough to prevent fire. Norcold is now using a thermocouple mounted directly to the burner tube.

Recall Chronology

02E-045:

Involved 1996-1999 production. Campaign replaced cooling units that have single weld pocket.

08E-030:

Involved 1999-2001 production. Norcold added the shut-off algorithm (used in production since 2003) that checks cooling ability and shuts boiler off if unit fails – inferred leak. Algorithm cycling runs for about an hour before detecting a failure. Units built after the affected the population have a stronger weld configuration and were not included in this campaign.

09E-026:

Re-recalled 1996-1999 units to add a thermal switch kit (used in production since 2005). The switch is pop-riveted to a collar around the burner tube – not attached directly to burner. 1999-2001 and 2003-2004 production contain shutoff algorithm and are not included in this campaign. 2001-2002 were covered in sister recall 09E-027.

09E-027:

Recalled 2001-2002 units to add thermal switch (sister recall to 09E-026).

10E-049:

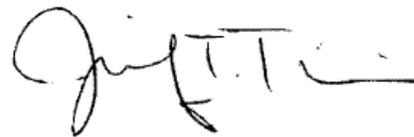
This campaign involves the full population, 1996-2010. Norcold will mount a thermocouple directly to the burner tube intended to identify overheat situations sooner than the thermal switch could and shut the system down before a fire can manifest.

Please advise if any aspect of the above is incorrect and provide an explanation as to why our information is incorrect and, to the extent applicable, provide the correct information.

Please provide the chronology and any necessary corrections to our chronology within ten (10) days of the date of this letter.

We appreciate your prompt response. I may be reached on (202) 366-0209 or at jennifer.timian@dot.gov should you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read 'J. Timian', with a stylized flourish at the end.

Jennifer T. Timian
Chief, Recall Management Division
Office of Defects Investigation
NHTSA

Attachment