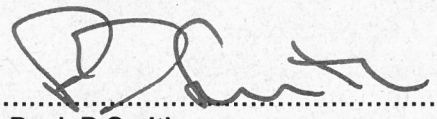
HM SENIOR CORONER
Lincolnshire

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** 1. [redacted] LEC Refrigeration, Glen Dimplex Home Appliances Ltd Stoney Lane, Prescot Merseyside L35 2XW 2. Office for Product Safety and Standards, Lower Ground Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ
1.	**CORONER** I am Paul Duncan Smith, Area Coroner for the Coroner Area of Lincolnshire, 4 Lindum Road Lincoln LN2 1NN
2.	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013. http://www.legislation.gov.uk/ukpga/2009/25/schedule/5/paragraph/7 http://www.legislation.gov.uk/uksi/2013/1629/part/7/made
3.	**INVESTIGATION and INQUEST** On 19 March 2018 I commenced an investigation into the death of Terence Penney. He was 73 years of age. The investigation concluded at the end of the inquest on 17 January 2019. The conclusion of the inquest was that Mr Penney died as a result of an accident, the medical cause of death being: 1a. Multiple Organ failure 1b 48% total body surface area burn injury
4.	**CIRCUMSTANCES OF THE DEATH** 1. On 21 February 2018 a fire occurred at Mr Penney's home in Mablethorpe, Lincolnshire within which he received fatal injuries. 2 The cause of the fire was identified as being a vapour cloud deflagration caused by the accidental ignition of R660A Iso-butane leaking from a LEC model R 5010W refrigerator owned by Mr Penney and used at the premises. 3 The unit had been purchased as new on 20.02.13 and was therefore 5 years old. 4 An examination of the unit after the fire identified 3 separate leaks within the unit; a) 1 at the bottom of the dryer component b) 1 on the suction pipe (side) out of the compressor c) 1 on an inline joint.

	5. The fire occurred when Mr Penney switched on an electric coffee machine. The spark produced ignited the flammable atmosphere of escaped Iso-butane causing a vapour explosion.
5.	**CORONER'S CONCERNS** During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths will occur unless action is taken. In the circumstances it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows. – 1. This fire occurred as a result of a vapour leak from a domestic fridge 2. No issue had been detected with the unit previously 3. The unit was barely 5 years old. 4. There was no suggestion that the unit had been abused or worked upon or that the leak arose as a consequence of anything other than a failure of the unit 5. There is likely to be a significant number of these units in circulation, some of them older than that owned by Mr Penney. The possibility of similar leaks occurring elsewhere and with similar tragic consequences must be considered.
6.	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you AND/OR your organisation have the power to take such action.
7.	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 29 March 2019. I, the Coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.
8.	**COPIES and PUBLICATION** I have sent a copy of my report to the Chief Coroner and to the following Interested Persons [redacted] I am also under a duty to send the Chief Coroner a copy of your response. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the Coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
	Dated this 28th day of January 2019  ..... **Paul D Smith** **Area Coroner**