

***“WHERE THERE’S WATER THERE’S FIRE” THEORY REJECTED DUE TO LACK OF PROPER SCIENTIFIC EXPERT TESTIMONY.***

In the case of *HARTFORD INSURANCE COMPANY, v. GENERAL ELECTRIC COMPANY*, ---F.Supp.2d ---, 2007 WL 4299793 (D.R.I.)(Dec. 7, 2007); a Rhode Island District Court upheld a Magistrate Judge’s decision to preclude Plaintiffs’ cause experts because their opinions were not based on scientific methods rendering their causation opinions inadmissible speculation. Homeowners and their insurer filed consolidated product liability actions against manufacturer and distributor of a water dispenser, alleging that the water dispenser was defective and that the defect caused a house fire.

Defendants moved to preclude testimony of plaintiffs' expert witnesses. The District Court held that although Plaintiffs' fire origin expert was qualified to testify as to the origin of the fire, their experts' report was inadmissible because it did not provide a scientific basis for their opinion as to causation.

The Plaintiffs' experts based their defect theory directly on the manufacturer's inclusion of chloride-rich insulation around the hot water tank of the water dispenser. In particular, the experts identified, through testing, the presence of high chlorine levels in the insulation on the hot water tank/heater assembly. This led to cracking and corrosion and pitting of the stainless steel hot water tank and resulted in water leakage. The Defendants did not contest the admissibility of this portion of the expert opinion.

The Defendants did contest the admissibility of the experts’ opinion that this water tank defect caused the fire in question. The Plaintiffs’ experts theorized that the corrosion caused the water dispenser's heat sensor to malfunction, possibly resulting in a continuously operating heating element and eventual fire. Their report provided no scientific support for this “heat sensor malfunction” theory. The Magistrate Judge found that the experts had no sound basis to draw the conclusion that the fire was caused by a malfunction in the water dispenser's heating system, let alone the heat sensor. The experts were not trained as electricians and performed no testing of the heating system.

Although Plaintiffs argued at oral argument that the electrical system was destroyed to the point that no analysis by the experts was possible, their expert report described a detailed examination of the heater assembly, including observations that evidence of damage or degradation to the heating coil was not observed and evidence indicative of electrical arcing or shorts was not observed. The Plaintiffs also had access to an exemplar of the heating element but failed to conduct additional testing. The net result, as found by the Magistrate Judge, was that the experts could draw no line between the alleged defect and the ignition of the fire.

The Plaintiffs’ experts concluded that based upon the results of the inspection and examinations, it is apparent that improper design and assembly of the water dispenser, using insulation with an extensive chloride content, contributed to and/or caused the failure of the unit and the resultant fire. From their review of the water dispenser, they

noted a significant accumulation of corrosion deposit evident at the temperature sensors. They opined that the oxide generated by the corrosion reaction acted as an insulator and prevented proper functioning of the sensors. If the sensors did not send the proper signal back to the relay switch to indicate that the water in the tank reached its set point, the heater would remain on continuously. The heat generated from the heater being on continuously combined with water leaking from the cracks and corrosion pits at the top of the hot water tank could generate enough heat to ignite combustible plastic in the water dispenser or adjacent combustible material in the kitchen.

Although they detailed the scientific testing conducted to form their opinion that the inclusion of high chloride external insulation on the hot water tank was a defect and led to corrosion and cracking of the tank, their report did not provide any similar scientific support for their heat sensor malfunction theory.

The Magistrate Judge's review of the experts' deposition testimony confirmed that that they could not support or defend their causation opinion. For instance, one expert agreed that the "sequence of events" leading to the fire was that "water leaked out of the tank; it corroded the sensors, the sensors malfunctioned and allowed the heating unit to run continually." When asked the scientific basis for his opinion as to the sensors, he testified that "[w]e didn't say they didn't properly operate" but that corrosion from the leakage did not allow them "to properly function, and in the view of not being able to properly function, you would have the resultant fire." The Magistrate Judge found that the experts were not aware of the details as to how the heat sensors worked, did not determine how hot the heating element would get if it ran continuously, and did not determine the fire ignition point of the water dispenser components. Similarly, the experts could not identify to a reasonable degree of scientific certainty either a heat source or fuel source.

These deficiencies forced Plaintiffs' counsel to concede at argument that "at this point we need to forget about the heat sensor." Plaintiffs then attempted to rehabilitate the cause opinion by casting a broader net and arguing that a water leak in an electrical device will necessarily cause a fire. As support, counsel essentially asked the Magistrate Judge to take judicial notice of this analytical leap by arguing at the hearing, that it is a "basic tenet of any material performance academia that electrical components when exposed to corrosion and water will short and cause fires." The Magistrate Judge summed up the problem by stating that the bottom line is that their expert report did not provide a scientific basis for the heat sensor causation theory, and the theory did not withstand scrutiny when examined at their depositions. It is no more than unsupported speculation, and is thus inadmissible.

The District Court in upholding the Magistrate Judge's determination that the testimony of plaintiffs' causation experts should be excluded stated that no reasonable jury could find that the alleged defect in the water dispenser was the proximate cause of the house fire. Even if the Court allowed the experts to testify to the relatively uncontroversial opinion that the alleged defect caused water leakage, such an opinion would only support a conclusion that the leakage resulted in water damage. For a jury to

conclude that the leakage resulted in the ignition of a fire would require a logical leap not supported by the experts' report or subsequent testimony. This case is an excellent example of both the importance of hiring qualified experts prosecute a claim and allowing defense counsel to pursue *Daubert* challenges to attack speculative causation opinions.