

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF KENTUCKY
PADUCAH DIVISION
CASE NO. 5:08-CV-212**

NANCY FAULKNER, Individually and as
Administratrix of the Estate of
ROBERT FAVID FAULKNER

PLAINTIFF

v.

ABB INC., et al.

DEFENDANT

MEMORANDUM OPINION & ORDER

This matter is before the Court upon Defendant ABB Inc.'s motion pursuant to *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579 (1993), to exclude the testimony of Plaintiff's expert, Dr. James Johnson (DN 100). Plaintiff has responded (DN 105). Defendant has replied (DN 130). This matter is now ripe for adjudication. For the following reasons, Defendant's motion is GRANTED IN PART.

Also before the Court is Plaintiff's motion for leave to disclose an additional expert witness (DN 99). Defendant has responded (DN 102). Plaintiff has replied (DN 107). This matter is now ripe for adjudication. For the following reasons, Plaintiff's motion is GRANTED.

BACKGROUND

Plaintiff, Nancy Faulkner, brought this products liability action against Defendant ABB, Inc. ("ABB") after her husband, Robert Faulkner, died in a workplace accident.¹ Robert

¹ Plaintiff originally brought this action in state court against ABB, Inc. ABB subsequently removed the case to this Court in December 2008 on the basis of diversity jurisdiction. ABB then received leave of this Court to file a third party complaint against Arkema, Inc. for purposes of apportionment of fault, contribution, and indemnity. After discovery revealed that contractors Apex Engineering or Riley Electric may have had some involvement in the installation of the analyzer shelter, and that either Riley Electric or Morsey Contractors installed the conduit, Plaintiff filed an amended complaint naming Riley Electric Company, Morsey Contractors, and Apex Engineering as defendants. In March 2011, this Court dismissed Plaintiff's claims against

Faulkner was employed by Arkema, Inc., a chemical plant in Calvert City, Kentucky. On October 30, 2007, the Arkema facility underwent a plant-wide power shutdown in order to perform some preventative maintenance. After Robert Faulkner failed to appear for a planned meeting at the end of his shift that day, Plaintiff notified Arkema. Arkema employees searched the plant grounds and discovered Robert Faulkner unresponsive inside of an analyzer shelter. Efforts to revive him were unsuccessful. The investigation determined that Robert Faulkner died of asphyxiation due to nitrogen gas, which displaced the oxygen in the analyzer shelter during the power shutdown.

The analyzer shelter in question was manufactured by Defendant ABB and purchased by Arkema in 2001 as part of a plant upgrade project. Arkema ordered various analytical instruments from ABB which would evaluate gas samples extracted from the smokestack via sample tubes connected to the instruments. To house these instruments, Arkema also ordered a prefabricated shelter from ABB. Once the shelter was delivered to Arkema, outside contractors completed the connections to the sample lines and utilities, including electricity and instrument air. Instrument air is air that has been purified and dehumidified for technical applications, such as purging analytical instruments. There were two cabinets mounted on the exterior wall of the analyzer shelter. Inside these cabinets were various valves, sample conditioning heaters, and a small electric pump which propelled gas through the lines. The instrument air constantly flowed to cool the electric pump. The instrument air system was designed in such a manner that, in the event of power loss, the instrument air would automatically be replaced by stored nitrogen gas.

During the October 30, 2007 power shutdown, the instrumentation in the analyzer shelter and the electric pump in the exterior cabinet were shut down; however, the nitrogen gas backup

the added defendants for failure to add the defendants within the one-year statute of limitations. Accordingly, the only remaining parties in this action are Nancy Faulkner and ABB.

continued to flow from the instrument air line. Sample tubes passing through the exterior cabinet entered the analyzer shelter and connected to the analyzing instruments by means of a metal conduit. Plaintiff contends that, during the power shutdown, nitrogen gas flowed from the exterior cabinet and migrated into the shelter through those conduits. The nitrogen then displaced the oxygen inside the analyzer shelter, creating an oxygen-deficient environment. Plaintiff has retained James Johnson, Ph.D., an industrial hygienist, to testify that that the analyzer shelter manufactured by ABB was defective.

DISCUSSION

I. ABB's Motion to Exclude the Testimony of James Johnson

ABB moves for this Court to exclude the testimony of Plaintiff's retained expert, James Johnson, because he is not qualified as an expert with regard to product design and industry standards. In the alternative, if Johnson's testimony is not excluded entirely, ABB moves for this Court to exclude any testimony or opinion formulated after the taking of his deposition.

a. Standard for Admissibility

The admissibility of expert testimony is governed by Federal Rule of Evidence 702. Under Rule 702, "[a] witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702. Rule 702 was amended in 2000 to address the Supreme Court's seminal opinion of *Daubert v. Merrill Dow*

Pharm., Inc., 509 U.S. 579 (1993), and its progeny, including *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999). See Fed. R. Evid. 702, Advisory Committee Notes.

“As a gatekeeper, the trial judge has discretion in determining whether a proposed expert’s testimony is admissible based on whether the testimony is both relevant and reliable.” *Rose v. Truck Centers, Inc.*, No. 09-3597, 2010 WL 3069613, at *4 (6th Cir. Aug. 6, 2010) (citing *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426, 429 (6th Cir. 2007); *Daubert*, 509 U.S. at 589). The Sixth Circuit, in *In re Scrap Metal Antitrust Litigation*, examined Rule 702 and found that a proposed expert’s opinion is admissible, at the discretion of the trial court, if the opinion satisfies three requirements: “First, the witness must be qualified by ‘knowledge, skill, experience, training, or education.’ Second, the testimony must be relevant, meaning that it ‘will assist the trier of fact to understand the evidence or to determine a fact in issue.’ Third, the testimony must be reliable.” 527 F.3d at 529.

b. Extent of Johnson’s Qualifications

The Court must determine whether Johnson, an Industrial Hygienist, is qualified by training or experience to offer the particular opinions he has formed in this case. Johnson purports to offer the following opinions in his expert report:

1. The design of the analyzer building did not address the hazards from the use of nitrogen as a replacement/back-up to the plant instrument air, and this hazard should have been identified by ABB as part of a “design/hazard assessment” process.
2. ABB had a duty to discuss the possibility for additional safety monitoring equipment and possibly sealing the conduits with Arkema in order to make sure the custom product they were supplying was safe for the intended application.
3. An alternative design for the analyzer building would be the addition of oxygen monitoring instrumentation and an alarm system.

DN 74-3 at p. 5 – 6. Additionally, in his deposition, Johnson opined that the lack of a seal on the electrical conduit caused the ABB analyzer building to be defective. DN 98-1 at p. 77. Johnson further opined that “the idea of having a conduit to pass the contaminants from the instrument cabinet into the instrument building is just – is a poor design, and [ABB] should have recognized and plugged that just as part of normal good practice.” DN 98-1 at p. 90.

Qualified experts are afforded the opportunity to offer opinion testimony as evidence where the court qualifies them as experts by “knowledge, skill, experience, training, or education.” Fed.R.Evid. 702. The review of an expert witness' qualifications to testify is a preliminary factual determination for the district court. *Kingsley Associates, Inc. v. Del-Met, Inc.*, 918 F.2d 1277, 1286 (6th Cir.1990). A trial court also “has broad discretion in the matter of the admission or exclusion of expert evidence.” *United States v. Kalymon*, 541 F.3d 624, 636 (6th Cir.2008) (quoting *United States v. Demjanjuk*, 367 F.3d 623, 633 (6th Cir.2004)). The decision to allow expert testimony under Rule 702 has been “broadly interpreted on the basis of whether the use of expert testimony will assist the trier of fact.” *Id.* This circuit has held “[t]he issue with regard to expert testimony is not the qualification of a witness in the abstract, but whether those qualifications provide a foundation for a witness to answer a specific question.” *Berry v. City of Detroit*, 25 F.3d 1343, 1351 (6th Cir.1994).

Here, Johnson has a B.A. in Chemistry, a Ph.D. in Inorganic and Organic Chemistry, and a M.S.H. in Air Pollution and Industrial Hygiene. He is a certified Industrial Hygienist who operates a consulting firm specializing in occupational safety and health and hazardous materials issues. The majority of Johnson’s work and publications focus on protective equipment and respiratory protection. From 1972 to 2005, Dr. Johnson held several positions in the Hazards Control Department of the Lawrence Livermore National Laboratory (“LLNL”), including the

section leader of the Chemical and Biological Safety Section in the Safety Programs Division. For eight years, Johnson was the field industrial hygienist responsible for developing, instituting, and monitoring industrial hygiene programs for at least eight of LLNL's program areas. In his expert report, Johnson states that his "specific experience addressing the safe handling of inert gases such as nitrogen and preventing oxygen deficient atmospheres in small work spaces using proper design, engineering controls and monitoring were directly applicable in this case." DN 74-3 at p. 4.

Here, the issue is whether or not these qualifications provide a foundation for Johnson to answer the specific question of whether the product supplied by ABB to Arkema was a defective product unreasonably dangerous.² ABB argues that Johnson's qualifications do not provide such a foundation because he has no background in engineering and has no training or experience with respect to the design or safety analysis of industrial plant air systems or their utilization in analyzer shelters. ABB further argues that Johnson has no knowledge of the relevant industry standards regarding the assessment of hazards by manufacturers and purchasers of such products.

² In all products liability cases, regardless of the theory, a plaintiff must prove that the product was defective. *Leslie v. Cincinnati Sub-Zero Products, Inc.*, 961 S.W.2d 799, 803-04 (Ky. App. 1998). Thus, "the question is whether the product creates such a risk of an accident of the general nature of the one in question that an ordinarily prudent company engaged in the manufacture of such a product would not have put it on the market." *Montgomery Elevator Co. v. McCullough*, 676 S.W.2d 776, 780 (Ky. 1984). With respect to design defect cases, the Kentucky Supreme Court has stated that:

A plaintiff in Kentucky can bring a defective design claim under either a theory of negligence or strict liability. The foundation of both theories is that the product is 'unreasonably dangerous' . . . So under either theory, it is the legal duty of the manufacturer to use reasonable care to protect against foreseeable dangers. In a design defect case courts use some form of risk-utility analysis to assess the decisions made by manufacturers with respect to the design of their products.

Ostendorf v. Clark Equip. Co., 122 S.W.3d 530, 535 (Ky. 2003). This risk-utility analysis balances the available alternative designs with the risk of the chosen design. *Toyota Motor Corp. v. Gregory*, 136 S.W.3d 35, 42 (Ky. 2004).

Plaintiff maintains that Johnson's specialized knowledge and experience as an industrial hygienist qualifies him to testify as to whether ABB's product was defective.

Although Johnson certainly has extensive education and expertise in the generic area of workplace safety and to some extent, the hazards of nitrogen in confined spaces, the Court is concerned with his lack of education, training, or experience with the specific product that is at issue here: an instrument air system, backed up with nitrogen, utilized in an analyzer building. Although Plaintiff touts Johnson's "vast experience in the field of industrial hygiene and in the design of safe cooling systems for sampling instruments," Johnson's own testimony belies this gross overstatement of experience with the product at issue in this case. Upon an examination of Johnson's CV and deposition testimony, it is clear that Johnson is not qualified to opine as to the existence of a design defect in the analyzer shelter.

With respect to his experience with instrument air delivery systems and the need for cooling systems for sampling instruments, Johnson testified that the "concept or that technique that was used there is pretty common art in industrial hygiene" and that "[he] certainly understand[s] the design and have looked at it and considered it in other instruments." Johnson Depo. at p. 24-25. Johnson noted that he "came across" instrument air at Diablo Canyon, a nuclear power plant on the west coast, but could not say whether that plant had a backup liquid nitrogen system. DN 98-1 at p. 17. Johnson testified that another time, while overseeing the replacement of a catalyst at an Exxon refinery, the facility talked to them "about the impact we might have on some of the tubing and things and be careful with the instrument air part of it." However, "[he] didn't get into the supply or the source of it; [he] just kn[e]w it was around." DN 98-1 at p. 18-19. Johnson has neither evaluated the safety of an industrial facility's instrument air system nor worked with a manufacturing facility that used instrument air that was

automatically backed up with nitrogen gas. DN 98-1 at p. 29. Thus, his knowledge of and experience with instrument air delivery systems backed up with nitrogen is limited.

Johnson's knowledge of relevant industry standards or practices is also limited. Johnson testified that he planned to perform additional investigation or research with respect to the "industry experience with nitrogen backup systems to plant air, looking at other manufacturers of similar products and how they address the issue being considered in this case."³ DN 98-1 at p. 8-9. Although Johnson testified that performing a design/hazard assessment is "certainly an accepted practice, from what I know," DN 98-1 at p. 50 – 51, he offered no foundation or basis for asserting that this is an accepted practice among manufacturers of analyzer shelters. In fact, Johnson testified that he planned to talk to some individuals who do have experience with the relevant products regarding what manufacturers do when there is a nitrogen backup system involved and how those manufacturers interact with their customers. DN 98-1 at p. 9. Therefore, it is clear that Johnson has very limited knowledge or experience with respect to the duties of analyzer shelter manufacturers and the design of analyzer shelters where an instrument air system is automatically backed up with nitrogen.

In sum, Johnson has no knowledge of industry standards or practices with respect to the duties or responsibilities of manufacturers of analyzer shelters, and has no experience with designing such products. Without such qualifications, there is no foundation upon which Johnson can base his opinions that the product supplied by ABB was a defective product

³ Johnson stated that "[t]he industry experience would be, of course, looking for published information that would be available in the process of attempting to identify individuals who I could talk with who would have experience with these products or this – these hazards and communicate with them and see where that information may lead me in understanding what the level of attention and understanding was to these – this hazard of nitrogen backup, how these instrument buildings and the equipment in them were installed, designed, who do other manufacturers do with these types of products and how do they interact with their customers in providing a package system to a plant like Arkema." DN 98-1 at p. 9.

unreasonably dangerous and that ABB should have recognized the hazard of the nitrogen backup system and addressed this hazard with an alternative design. Therefore, the Court concludes that Johnson does not have the “knowledge, skill, experience, training, or education” to render an opinion on defective design of instrument air systems and analyzer shelters. Accordingly, the Court will exclude the testimony of Johnson as it relates to the following issues: (1) the existence of a defect in ABB’s product, (2) the existence of an alternative feasible design, and (3) ABB’s duty to recognize and address the nitrogen backup system. However, the Court finds that Johnson is qualified to testify generally as to the dangers of nitrogen in enclosed spaces. Because the subject of Johnson’s continued investigation relates to his inadmissible opinions, it is unnecessary to address ABB’s alternative request that this Court exclude any testimony or opinions which go beyond those set forth in his April 25, 2011 report.

II. Plaintiff’s Motion for Leave to Name Additional Expert Witness

Plaintiff seeks leave of this Court to identify another expert witness, engineer Jack Madeley, to counter the opinions of Chuck Stern and Wayde Wong, and to rebut the opinion of Podluski. Defendant ABB opposes this motion.

a. Relevant Background of Parties’ Expert Witness Disclosure

The Court initially established deadlines of April 1, 2010 for Plaintiff’s disclosure of her expert witnesses, and July 1, 2010 for ABB’s disclosure of its expert witnesses (DN 42). These dates passed without either Plaintiff or ABB disclosing any expert witnesses. On July 27, 2010, Plaintiff moved for an extension of the deadlines and stated that additional discovery was needed before she could identify her experts. This Court then granted Plaintiff’s motion and entered a scheduling order (DN 50) extending Plaintiff’s expert witness disclosure deadline to December 31, 2010. ABB’s deadline was extended to March 1, 2011.

Plaintiff deposed Chuck Stern, a former ABB design engineer and person most knowledgeable concerning the analyzer building at the Arkema plant,⁴ on December 1, 2010 in Houston, Texas. Stern testified that, although he had no memory working on the subject analyzer building at Arkema, ABB “probably” installed the conduit and junction box. Stern also testified that he was first asked to provide expert testimony in this case sometime prior to his first deposition. DN 99-2 at p. 2.

On December 31, 2010, Plaintiff identified Johnson as an expert in the field of Industrial Hygiene. Johnson’s December 31, 2010 report did not supply his ultimate opinion and noted that the matter was still undergoing review. On April 1, 2011, ABB moved to exclude Dr. Johnson’s testimony due to the failure to set forth his opinions (DN 73). In response, Plaintiff sought to file a supplemented expert report (DN 74). This Court allowed the supplemented expert report and denied ABB’s motion because the supplemented report was provided to ABB before the end of the discovery deadline and before ABB had taken Johnson’s deposition (DN 76). On May 19, 2011, this Court entered an agreed order extending the discovery deadline for the sole purpose of allowing Plaintiff to conduct the deposition of the ABB corporate representative (DN 77).

On July 30, 2011, ABB requested dates to depose Johnson. Plaintiff contends that, at this time, ABB indicated that it intended to retain experts for the first time.⁵ On August 3, 2011, ABB moved for an extension of the discovery deadlines and of the deadline for the disclosure of its expert witnesses (DN 78). This Court granted ABB’s motion and entered an amended scheduling order on September 2, 2011. This scheduling order set a October 1, 2011 deadline

⁴ Stern was offered as a lay witness, and not as ABB’s corporate representative.

⁵ ABB’s deadline to disclose its experts was March 1, 2011. DN 50.

for Plaintiff's identification of her expert witness and a November 1, 2011 deadline for ABB's identification of its expert witnesses. The close of all discovery was set for December 1, 2011.

ABB timely identified its expert witnesses on November 1, 2011, naming Kim Knotts, Steven Slates, Charles "Chuck" Stern, Wayde Wong, Bayless Kilgore, and Daniel Podkulski. With respect to Chuck Stern, ABB stated that he is a fact witness and a potential expert witness to the extent his testimony may involve issues of opinion. With respect to Daniel Podlusk, ABB stated that he will testify as an expert in industrial manufacturing industry practices with regard to customer specification of analyzer buildings and related safety issues and safety analysis. Plaintiff deposed Podlusk on November 30, 2011 and Kilgore on January 11, 2011. Plaintiff now seeks to name an additional expert witness.

b. Standard

Under the Federal Rules of Civil Procedure, "a party must disclose to the other parties the identity of any witness it may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 703." Fed.R.Civ.P. 26(a)(2)(A). A party planning to use an expert witness "must make these disclosures at the times and in the sequence that the court orders." Fed. R. Civ. R. 26(a)(2)(C). "If a party fails to ... identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence ... at a trial, unless the failure was substantially justified or is harmless." Fed.R.Civ.P. 37(c)(1). Here, Plaintiff has the burden of proving that the delay in disclosing Madeley as an expert witness was harmless. *See Roberts ex rel. Johnson v. Galen of Virginia, Inc.*, 325 F.3d 776, 782 (6th Cir. 2003). Harmlessness "involves an honest mistake on the part of a party coupled with sufficient knowledge on the part of the other party." *Id.* at 783. "[D]istrict courts have broad discretion to exclude untimely disclosures of expert-witness testimony." *Pride v. BIC Corp.*, 218 F.3d 566, 578 (6th Cir.2000).

c. Analysis

Plaintiff contends that her delay in disclosing Madeley as an expert witness is substantially justified because when she previously disclosed her expert witnesses, she had no way to know that ABB intended to disclose Chuck Stern and Wayde Wong as expert witnesses. She contends that, had she known such when she deposed them in December 2010 and July 2011 respectively, she would have retained an expert to counter their opinions. Plaintiff further contends that she did not anticipate ABB retaining an engineer such as Podluski since no one involved in the design and manufacture of analyzer building has a degree in engineering.

In response, ABB contends that Madeley's opinions are merely "a cloak under which to fill the breach inherent in the disqualification of [Dr. Johnson]." ABB notes that Plaintiff fails to explain why, "in a case in which the defective design of an industrial product is alleged, they did not realize they would require the testimony of an engineering expert with experience in the relevant field until *after* the defendant disclosed an intention to use such experts." DN 102 at 3. ABB further contends that permitting Plaintiff to identify an expert so close to trial would be prejudicial, as there will be little time to evaluate the Madeley's opinion, confer with its own experts, and prepare for cross-examination at trial.

In light of the Court's determination that Johnson is not qualified to render an opinion that ABB's product was defective, the Court finds that the delay in naming Madeley was substantially justified. Neither party has closely complied with this Court's deadlines regarding the disclosure of expert witnesses, as ABB previously moved for and was granted an extension of the deadline to disclose its expert witnesses five months after its deadline had passed. The Court also notes that there is no indication of dilatory delay tactics or bad faith on the part of Plaintiff. Furthermore, because the parties have litigated this case for three years and an expert

opinion is necessary for Plaintiff's claims to proceed to trial, the Court will allow Plaintiff to name Madeley as an expert witness. *See Betzel v. State Farm Lloyds*, 480 F.3d 704 (5th Cir. 2007) (holding that district court erred in excluding plaintiff's late designated expert witness where exclusion would be dispositive of the case). However, to ensure that ABB is not prejudiced by this late disclosure, the Court will continue the trial in order to allow time for ABB to depose Madeley and to disclose any rebuttal expert report. Plaintiff will not be allowed to name any additional experts.

CONCLUSION

For the foregoing reasons, Defendant ABB's motion to exclude the testimony of James Johnson (DN 100) is GRANTED IN PART. Johnson's testimony or opinion as it relates to (1) the existence of a defect in ABB's product, (2) the existence of an alternative feasible design, and (3) ABB's duty to recognize and address the nitrogen backup is inadmissible. Johnson may testify as to the dangers of nitrogen in enclosed spaces.

IT IS FURTHER ORDERED that Plaintiff's motion for leave to name an additional expert witness (DN 99) is GRANTED. It is HEREBY ORDERED:

- (1) The trial in this matter, currently scheduled for February 27, 2012, is continued.
- (2) Plaintiff shall present Mr. Madeley for a deposition **on or before March 2, 2012.**

Plaintiff shall pay the fee charged by Mr. Madeley for the deposition.

- (3) Defendant shall have until **March 23, 2012** to supplement any rebuttal expert report.
- (4) The close of discovery shall be **April 20, 2012.**
- (5) The deadline for filing dispositive motions has passed except as they may relate to new expert testimony.

- (6) *Daubert* motions, motions in limine, and any dispositive motions related to expert testimony shall be filed by **May 11, 2012**, with all responses due in 14 days, and any replies due 7 days thereafter.
- (7) Trial in this matter is scheduled for **July 23, 2012**. All instructions, exhibits, and witness lists shall be filed 21 days prior to trial, with any objections thereto within 7 days.
- (8) A final pre-trial conference will take place on **July 13, 2012 at 12:00 p.m. C.D.T.**
The telephonic conference on February 17, 2012 is canceled.


**Thomas B. Russell, Senior Judge
United States District Court**

February 9, 2012