

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS**

DUANE ANGLETON, et al.,

Plaintiffs,

vs.

Case No. 08-1255-EFM

COFFEYVILLE RESOURCES REFINING
& MARKETING, LLC,

Defendant.

MEMORANDUM AND ORDER

Plaintiffs are seeking recovery for damages they allegedly incurred as a result of thousands of gallons of crude oil, diesel, and other pollutants being released from Defendant's refinery into the Verdigris River. This matter is now before the Court on Defendant's motion to strike the report and testimony of Plaintiff's expert, Fred Haub (Doc. 174). A hearing on Defendant's motion was held on August 8, 2011. For the reasons stated below, the Court grants in part and denies in part Defendant's motion.

I. BACKGROUND

Defendant operates an oil refinery in Coffeyville, Kansas, that is adjacent to the Verdigris River. On June 30, 2007, at 7:50 p.m., due to the tremendous amount of rain that the Verdigris River basin had received, and the fact that it was predicted that flood waters would come close to entering the refinery, Keith Osborn, the refinery's general manager, decided to shut the refinery

down, a task that normally would take at least one day to accomplish. A few minutes later, it was decided that the Bartlesville Pipeline Group (“BGP”), the organization in charge of the feeding tanks at the East Tank Farm (“ETF”) which is headquartered forty-five minutes away in Bartlesville, Oklahoma, would activate the transfer pump on the feeder tank for Tank 8010, a forty-eight feet tall tank capable of holding 80,000 barrels of oil,¹ and pump an additional four feet of oil into that tank so that it would not float of its foundation. Once the desired height was reached, it was intended that an Oil Transfer System (“OTS”) operator, i.e., someone at the refinery, would close Tank 8010's inlet valve.

At 11:15 p.m., the flood waters overcame the refinery's levee and started flowing into the plant. A little over an hour later, the pumps to Tank 8010 were shut down because the oil was approaching the desired height, thirty-two feet. However, the inlet valve to the tank was not shut, thus allowing oil to continue to be gravity fed from the feeding tank to Tank 8010 at a rate greater than 1,500 barrels per hour. According to Bill Edens, manager of the BPG, he had the capability of electronically closing the valve on the feeding tank in the ETF, which is located across the river from the refinery. However, he did not close the valve when he turned off the transfer pump because the normal practice was to control the inflow into Tank 8010 by opening or closing the valve at the refinery.

At some point, the dike surrounding Tank 8010 was beached. The dike, at its peak, has an elevation of 727 feet.. The highest oil mark on Tank 8010, which indicates the level of the flood water, was 729 feet. While flying over the refinery on the morning of July 1, Osborn observed oil flowing down the side of Tank 8010 and into the surrounding flood waters. Defendant estimates that

¹The elevation of the tank floor is 716 feet.

the release began sometime between 10:15 and 10:30 a.m on July 1 and stopped sometime between 11:15 and 11:30 a.m. During that time, nearly 80,000 gallons of oil were released from Tank 8010. The flood waters carried the oil downstream and into Oklahoma.

In an effort to establish Defendant's negligence, both ordinary and gross, in allowing oil to be released from its refinery, Plaintiffs have retained the services of Fred Haub. Mr. Haub has a bachelor's degree in mechanical engineering and a master's degree in industrial engineering. According to Mr. Haub, he has spent thirty-nine years working in the petroleum industry. During this time, Mr. Haub planned the development of refineries, developed and maintained corporate engineering standards, floated tanks off their foundation to move them to a new location, troubleshot problems that arose at various refineries, and participated in project management, management for specialty engineering and maintenance services, and management of regional corporate offices including operations, maintenance, safety, and security. Mr. Haub also served on an American Petroleum Institute ("API") committee that was charged with developing a recommended practice for the design of transport tubes, which provided Mr. Haub with a very good idea of what it takes to rupture a pipe. Additionally, Mr. Haub worked at the Coffeyville refinery for a number of months. At no time while he was at the Coffeyville refinery, or any other refinery for that matter, did Mr. Haub participate in an emergency shutdown or have direct responsibility for running a refinery.

For this case, Mr. Haub has prepared an expert report.² Believing that the following ten opinions violate Rule 702's requirements, Defendant has filed the a motion asking that they be struck³:

(1) A rupture of the transfer line should not occur with the valve shut off and transfer pump operating if the system is designed properly and the lead operators should be aware of this.

(2) There was not any evidence in the depositions that the OTS lead operators were adequately trained in emergency shut down procedures. These items indicate a serious lack of training and emergency procedures.

(3) Turning on the ETF Transfer pump caused a higher level in the charge tank than would have existed with gravity flow. If this unnecessary procedure would not have been done it is very likely that the charge tank would not have overflowed.

(4) There should be significant concern about the safety of a charge tank fill system that does not include an automatic shut down of the transfer line based on high level in the charge tank and/or shutdown of the crude charge pumps.

(5) It is not safe to fully depend on local operators to close the valve or have to make a call to the pipeline control center to get it shut down in emergencies, especially since the control center is not operated 24 hrs/day. There are too many situations that could prevent local operators from getting to the local valve or making a phone call on a timely basis.

(6) It seems to me that it would be much safer and easier for the crude unit control operation to be responsible for the inlet and outlet of the charge tank rather than the split responsibility that exists. Total responsibility for the charge tank should be in one control room.

(7) The OTS operators indicated they are not familiar with the ETF shut off system. If the system remains as it was in 2007, the OTS operators should be trained so they can shut-off the ETF transfer line valve in emergency because the ETF is not manned

²See Doc. 175-1. Mr. Haub has also submitted two affidavits. See Docs. 149-2 & 177 (incorporating by reference Doc. 68-2 in *Vowell v. Coffeyville Res. Ref. & Mktg., LLC*, 09-1303-EFM). However, neither of these affidavits are materially different from the statements contained in Mr. Haub's expert report.

³In its briefing, Defendant also sought to preclude Mr. Haub from opining on whether refinery personnel could have closed the inlet valve on Tank 8010 or the valve of the feeding tank at the ETF after the refinery's levee was breached, but before oil was released. At the hearing, Plaintiffs' counsel stated he does not intend to have Mr. Haub discuss such matters at trial. Therefore, the Court considers the issue moot.

24 hrs/day. It is only a five to ten minute trip for OTS and could be at least a 1 hour trip for the BPG.

(8) There was no reason to take the charge tank level to 32 feet. It was very poor judgment.

(9) In summary, my opinion is that the crude oil release of approximately 1,900 barrels was the result of a reckless operation that involved poor judgment and priorities, a lack of training in emergency procedures, and insufficient controls on the charge tank system.

(10) Flood water velocity should not have had a significant effect on the charge tank because the part of the tank substantially effected by water flow is that part in the flood water above the dike, which was approximately two feet. Also, pictures taken of the overflowing oil indicate a low velocity in the tank area.

II. STANDARD

Opinions based on scientific, technical, or specialized knowledge are governed by Rule 702. Rule 702 provides that a qualified witness may testify in the form of opinion or otherwise as to scientific, technical, or other specialized knowledge if such testimony will assist the trier of fact to understand the evidence or to determine a fact in issue, “if, (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.”⁴ While expert witnesses tend to qualify based on their professional studies, this is not the only basis for qualification; rather, an expert may also qualify based on their personal experience.⁵ In deciding whether to admit expert testimony, a district court has broad discretion.⁶

⁴Fed. R. Evid. 702.

⁵*See, e.g., Goebel v. Denver & Rio Grande W. R. Co.*, 346 F.3d 987, 992 (10th Cir. 2003) (recognizing that expert witnesses may base their testimony on either professional studies or personal experience).

⁶*Kieffer v. Weston Land, Inc.*, 90 F.3d 1496, 1499 (10th Cir. 1996) (citing *Orth v. Emerson Elec. Co., White-Rodgers Div.*, 980 F.2d 632, 637 (10th Cir. 1992)).

The proponent of expert testimony must show “a grounding in the methods and procedures of science which must be based on actual knowledge and not subjective belief or unaccepted speculation.”⁷ To determine whether an expert opinion is admissible, the Court performs a two-step analysis. First, the Court must determine “if the expert’s proffered testimony . . . has ‘a reliable basis in the knowledge and experience of his discipline.’ ”⁸ The Court must then inquire into whether the proposed testimony is sufficiently “relevant to the task at hand.”⁹ An expert opinion “must be based on facts which enable [him] to express a reasonably accurate conclusion as opposed to conjecture or speculation . . . absolute certainty is not required.”¹⁰

The plaintiff need not prove that the expert is undisputably correct or that the expert’s theory is “generally accepted” in the scientific community. Instead, the plaintiff must show that the method employed by the expert in reaching the conclusion is scientifically sound and that the opinion is based on facts which sufficiently satisfy Rule 702’s reliability.¹¹

Daubert sets forth a non-exhaustive list of four factors that the trial court may consider when conducting its inquiry under Rule 702: (1) whether the theory used can be and has been tested; (2) whether it has been subjected to peer review and publication; (3) the known or potential rate of error; and (4) general acceptance in the scientific community.¹² These factors may or may not be pertinent, depending on the nature of a particular issue, the expert’s particular expertise, and the

⁷*Mitchell v. Gencorp Inc.*, 165 F.3d 778, 780 (10th Cir. 1999).

⁸*Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 884 (10th Cir. 2005) (quoting *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579, 592 (1993)).

⁹*Id.* (quoting *Daubert*, 509 U.S. at 597).

¹⁰*Dodge v. Cotter Corp.*, 328 F.3d 1212, 1222 (10th Cir. 2003).

¹¹*Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1233 (10th Cir. 2004).

¹²*Daubert*, 509 U.S. at 593-94.

subject of the expert's testimony; however, the Court may consider these factors where they are a reasonable measure of reliability, which is a consideration the Court has broad latitude to determine.¹³

III. ANALYSIS

In support of its position, Defendant advances three main arguments: first, that a number of Mr. Haub's opinions are irrelevant to the issues in this case; second, that Mr. Haub is not qualified to offer the opinions that he has because such opinions relate to how a refinery is operated, not how it is designed, which is Mr. Haub's expertise; and third, that Mr. Haub's opinions are not reliable. Beginning with Defendant's first argument, the Court finds that it has some merit. As noted by Plaintiffs' counsel during the hearing, Plaintiffs are not proceeding on a theory that the refinery was not properly designed. While Mr. Haub has considerable personal experience in the design of refineries, his experience does not demonstrate significant operational experience in refinery shutdowns or emergencies. As a result, Mr. Haub's fourth and sixth opinions, which relate to perceived design flaws, are irrelevant, and should thus be excluded. However, as for the rest of Mr. Haub's opinions, the Court cannot say at this time that they are irrelevant to Plaintiffs' outstanding claims. Therefore, to the extent that Defendant seeks to have Mr. Haub's non-design related opinions excluded on the ground of relevancy, its effort fails.

With regard to Defendant's second argument, it is well made, at least in part. After reviewing the materials submitted and hearing the testimony offered, the Court believes that while Mr. Haub's experience in the petroleum industry qualifies him to testify about the design of a refinery and the integrity of the materials used therein, it is insufficient to enable him to opine on

¹³*Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 153 (1999).

flaws in a refinery's operating procedures or emergency shutdown procedure.¹⁴ Notably absent from Mr. Haub's illustrious work history is any indication that Mr. Haub was ever responsible for developing either standard operating procedures or an emergency shutdown procedure for a refinery, that Mr. Haub ever participated in an emergency shutdown of a refinery, or that Mr. Haub was ever responsible for running a refinery or training key personnel on how to properly operate a refinery or shut it down in an emergency.¹⁵ Therefore, in light of these deficiencies, the Court concludes that Mr. Haub should be precluded from offering these following opinions: (1) that lead operators should have been aware that a transfer line could not rupture if an inlet valve was shut; (2) that lead operators were not adequately trained in emergency shutdown procedures¹⁶; (5) that it is not safe to fully depend on local operators to close an open valve; (6) that one control room should have total responsibility for a plant shutdown; (7) that refinery operators should be trained to shutdown the feeding tanks at the ETF; and (9) that the oil release was the result of a reckless operation that involved poor judgment and priorities, a lack of training in emergency procedures, and insufficient controls on the charge tank system.

¹⁴*See, e.g., Vigil v. Burlington N. & Sante Fe Ry. Co.*, 521 F. Supp. 2d 1185, 1203-04 (D.N.M. 2007) (recognizing that an expert's expertise in one area of an industry does not necessarily qualify him to offer expert testimony on a different area in that same industry).

¹⁵Based on his closing argument, it appears that Plaintiffs' counsel believes that Mr. Haub's experience as chair of a committee that designed an emergency response plan at the Conoco facility in Ponca City qualifies Mr. Haub to testify about Defendant's shutdown procedure and training of its employees. It does not. While on the stand, Mr. Haub offered no specifics about what role, if any, he played in actually developing the shutdown procedure that operators were to follow at Ponca City. Furthermore, he did not opine on what role, if any, he played in implementing the shutdown procedure that the committee developed. As a result, Plaintiff failed to show that Mr. Haub had the requisite experience to offer expert testimony on the issue of whether Defendant's shutdown procedure was deficient.

¹⁶It is far from certain that Mr. Haub has adequate and complete information as to the training which the lead operators had received, but the Court does not need to decide that issue, as the Court determines that Mr. Haub lacks the expertise to opine as to what amount of training would be adequate in any event.

With the above said, though, the Court does find that Mr. Haub does have the requisite expertise to discuss some of the matters contained in his report. For instance, based on Mr. Haub's experience designing refineries and his work with API, the Court concludes that while Mr. Haub cannot opine on whether lead operators should have known it, he can opine on (1) whether a transfer line will rupture if an inlet valve is closed. Additionally, due to his experience in the industry, Mr. Haub may testify to (3) the effect that turning on the transfer pump had on the oil levels in Tank 8010. Lastly, in light of the fact that Mr. Haub has floated oil tanks and it appears that Mr. Haub has a strong grasp of the applicable principles of physics, the Court finds that Mr. Haub may testify as to (8) whether additional oil needed to be added to Tank 8010 to prevent that tank from floating away.

As for Defendant's third argument, it lacks legal traction. First, Mr. Haub's opinion relating to whether a transfer line would burst if an inlet valve was shut is based on Mr. Haub's experience in the petroleum industry.¹⁷ Therefore, the fact that this opinion has not been subjected to testing or peer review or been shown to be generally accepted in the scientific community is immaterial.¹⁸ As for the remaining opinions, which are premised upon mathematical and/or scientific calculations, not experience, the Court finds, based on Mr. Haub explanation of the methods he used, that they are reliable. The fact that Defendant's expert disagrees with some of Mr. Haub's conclusions goes to the weight of those conclusions, not admissibility.¹⁹ As a result, reliability does not serve as a basis for excluding Mr. Haub's opinions.

¹⁷*See, e.g., Ash Grove Cement Co. v. Emp'rs Ins. of Wausau*, 246 F.R.D. 656, 664 (stating that opinions based on an expert's personal experience are sufficiently reliable for purposes of Rule 702).

¹⁸*See, e.g., id.*

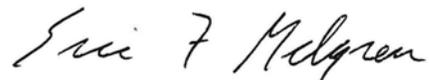
¹⁹*See, e.g., Belisle v. BNSF Ry. Co.*, 697 F. Supp. 2d 1233, 1242 (D. Kan. 2010).

In sum, a number of Mr. Haub's opinions fail to meet Rule 702's requirements. However, the Court does find that the following opinions survive Rule 702 scrutiny and thus can be offered at trial: (1) to the extent it relates to whether a transfer line should rupture if an inlet valve is shut; (3) in its entirety; (8) in its entirety; and (10) in its entirety. The Court strongly admonished Mr. Haub, however, that when giving these opinion at trial, he should avoid abdicating his role as a provider of information, and assuming the role of advocate.²⁰ The use of inflammatory language will not be tolerated and the utterance of such language will be stricken from the record.²¹

IT IS THEREFORE ORDERED that Defendant's motion to strike the report and testimony of Plaintiff's expert, Fred Haub (Doc. 174) is hereby **GRANTED IN PART AND DENIED IN PART**.

IT IS SO ORDERED.

Dated this 11th day of August, 2011.



ERIC F. MELGREN
UNITED STATES DISTRICT JUDGE

²⁰*See, e.g., Bentley v. Shalala*, 52 F.3d 784, 787 (8th Cir. 1995); *Kilcrease v. T.W.E., L.T.D.*, 2004 WL 5509089, at *2 (D. Kan. May 18, 2004).

²¹An example of the inflammatory language that the Court has in mind can be found in opinion three. There, Mr. Haub states that if "this unnecessary procedure would not have been done it is very likely that the charge tank would not have overflowed." The use of unnecessary in this context is, for lack of a better word, unnecessary, and if this word were used in the same manner at trial it would be struck.