UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

MARATHON PETROLEUM COMPANY LP, formerly known as MARATHON PETROLEUM COMPANY, LLC,

Plaintiff,

Case Number 09-13804 Honorable David M. Lawson Magistrate Judge Paul J. Komives

v.

MIDWEST MARINE, INC., WALTER S. CYTACKI, ALFRED CYTACKI, and ALICIA CYTACKI KRALL,

Defendants,

and

MIDWEST MARINE, INC.

Counter-Plaintiff,

v.

MARATHON PETROLEUM COMPANY LP, formerly known as MARATHON PETROLEUM COMPANY, LLC,

Counter-De	efendant.	
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OPINION AND ORDER ADJUDICATING MOTIONS IN LIMINE AND MOTIONS TO EXCLUDE EXPERT WITNESSES AND ESTABLISHING NEW CASE MANAGEMENT DATES

Presently before the Court are several motions filed by plaintiff Marathon Petroleum Company challenging the evidence the defendants seek to offer at trial. The defendants also have filed a motion challenging the plaintiff's expert witness. The Court has heard oral argument on the motions and will address them in turn.

The case is about a failed storage tank that contained thousands of gallons of asphalt that belonged to Marathon. Defendant Midwest Marine, Inc., which does business as Michigan Marine Terminal (MMT), is the owner of a storage tank facility in River Rouge, Michigan. On May 21, 2009, one of MMT's storage tanks, known as Tank B, ruptured and spilled approximately 12,758 tons (which amounts to 2,980,471 gallons) of liquid asphalt. A principal bone of contention in this case is the cause of the tank rupture. Marathon alleges that Tank B was defective and negligently maintained. MMT says that its tank was in fine shape until Marathon introduced a batch of asphalt that was mixed with polyphosphoric acid ("PPA") in such a way that the asphalt blend became corrosive and destroyed the tank wall, causing it to rupture. Marathon seeks to recover the cost of its asphalt. MMT has counterclaimed for the damage to its tank and property, which was damaged further by a fire that occurred during the spilled-asphalt recovery effort.

II.

A. Marathon's motion to exclude expert Elizabeth Buc [dkt. #147]

The defendants have retained Dr. Elizabeth Buc, a metallurgical engineer, to furnish opinions on (1) the cause of the failure of Tank B; (2) the cause of the fire that occurred on October 20, 2009; and (3) the quality of asphalt on the ground inside the containment areas at the terminal after the fire. Marathon contends that Dr. Buc's opinions, especially as to the cause of Tank B's failure, are based on speculation, uninformed by proper testing, and were formed by using improper methodology.

The focus of Dr. Buc's opinion about Tank B's failure is on an asphalt additive called polyphosphoric acid (PPA). PPA is a known corrosive to carbon steel; Tank B is made of carbon steel. Dr. Buc opines that Marathon did not properly blend PPA with its "neat" asphalt, causing the

blended asphalt to become acidic, hazardous, and corrosive. She asserts that the corrosive asphalt blend damaged the tank walls and caused Tank B to fail.

Dr. Buc is a licensed Professional Engineer in metallurgical engineering in Michigan and holds a Ph.D. in Material Science and Engineering, an M.S. in Chemistry, and a B.S. in Chemistry. Dr. Buc is a Certified Fire Investigator. She apparently has been recognized as an expert in chemistry, metallurgy, and fire investigation, and she also is a voting principal member of the National Fire Protection Association's Hazardous Chemicals Technical Committee and was appointed to the Fire Protection Research Foundation Research Advisory Committee. Dr. Buc's analysis of the materials found in Tank B after the rupture and her reasoning as to the failure mechanism is set forth in her report. It is useful to quote it at some length to put into context Marathon's criticism of it.

The contents of Tank B are not homogeneous. Tank B contains a liquid phase that is clearly acidic with pH as low as 1.4 (e.g. strong acid). Even the asphalt binder inside Tank B is acidic, with leachate pH ranging from 2.1 to 5.8. The asphalt binder is supposed to be pH neutral. Materials with pH less than 2.0 are considered hazardous waste. Corrosive solids are recognized hazardous materials. At the time of this report, there is approximately 40-ton of asphalt binder remaining inside Tank B. MMT does not have a permit for and were never told they were storing hazardous material.

When Tank B was first opened in March 2010, there were 2 feet 3 inches of asphalt binder under 2 to 3 inches of water on top of the asphalt binder. The water was drained from the tank so that excavation of the asphalt binder could be initiated in order to isolate the failure location. The pH of the water, sampled when the tank was first opened, ranged from 2.58 to 2.66. Chemical analysis of this water from the tank showed 1,200 mg/L sulfate anion. The water was most likely rain and firefighting water that entered the thank top vents and that sat in contact with the acidic asphalt binder.

After the standing water was pumped out and as the asphalt binder contents of the tank were being excavated, another liquid phase at/near the bottom inside Tank B was observed. The release of the liquid phase was witnessed by the EQ excavator operator and by terminal employees. This liquid was sampled from various locations

inside the tank for pH and chemical analysis. The quantity, location, and release of this liquid were documented with photographs and video recordings. Marathon engineers were present and collected many of the same samples.

The presence of this liquid phase was observed nearly everywhere inside the Tank — along the wall starting at the northeast by the EQ operator, the entire north to north east wall or shell extending past the location of the failure as well as in the center of the Tank. The liquid phase was present at the bottom of the tank, at/near the tank's floor-shell interface and was also observed to form pockets or blisters around the coil pack, columns and the center of the Tank. . . . Individual blisters were easily drained of 250 mL of liquid (Fig. 3). To further demonstrate the pervasiveness of the liquid phase inside the Tank, a hole was drilled 2 inches from the bottom of the sketch plate *from the exterior* of the Tank. The liquid drained out of the opening. During one site visit inside Tank B on April 2010, a total of 4,250 mL (1.1 gallon) of the liquid were collected over a limited area of the tank's floor. Samples of this liquid collected from at least 10 different locations inside the Tank are preserved in FMRL's Livonia laboratory.

The asphalt binder closest the floor inside the tank was observed to be saturated with this liquid. The saturated asphalt binder was brittle and granular and did not resemble asphalt binder. The saturated asphalt binder and liquid accumulation extended at least ~24 inches from the shell towards the center of the tank. This saturated asphalt binder is heterogeneous and contains deleterious materials. This physical appearance and granular texture and acidity are more like acid tar, a known hazardous material, and a product of the petroleum refining industry.

The liquid was subject to analysis by four laboratories and was found to be strongly acidic. The liquid was clear, ranged in color from light pink to reddish and had a distinctive odor similar to vinegar. The pH of the liquid ranged from 1.4 to 3.87. FMRL reported pH 1.84 on March 27, 2010. A sample of the liquid in Tank B was collected by EQ on August 19, 2010, and analyzed by Trimatrix Laboratories. Trimatrix reported the pH of the liquid was 1.80. Field measurements during sampling on December 2 registered pH 1.40 and 1.85.

The liquid was subject to chemical analysis for ions and metals by ion chromatography and inductively coupled plasma spectroscopy. The analytical results of various samples revealed orthophosphate (PO_4) sulfate (SO_4) anions and iron (Fe) metal. The orthophosphate concentration ranged from 0 to 630 mg/L, the sulfate ranged from 13,000 to 54,000 mg/L, and the iron ranged from 26 to 52 mg/kg. The liquid drained from the random hole in the tank shown in Fig. 3 contained 23,000 mg/L sulfate anion, 630 mg/L orthophosphate anion and 5,190 mg/kg iron, and 287 mg/kg phosphorous metals.

The liquid, when dried in a laboratory oven, contained 5wt% solids. The dried solids were white and could be re-dissolved in water. Trimatrix reported the pH of water with the dissolved solids, as per EPA 9045C, was 2.88. Semi-quantitative chemical analysis of the dried solids from the acidic liquid by Energy Dispersive X-ray spectroscopy showed 68-70wt% iron (Fe) and 30-32wt% sulfur (S). The same white solids were observed, photographed, and sampled from the surface of the asphalt binder as well as on the carbon steel walls and columns throughout Tank B.

When extracted with the same mass of water, as per EPA 9045D, pH of water extract or leachate of the saturated asphalt binder at the Tank floor ranged from 1.93 to 2.1. The asphalt saturated with acid was further analyzed by bomb combustion and ion chromatography, and inductively coupled plasma spectroscopy. The saturated asphalt sample was 15% ash or noncombustible material. Elemental analysis of the ash showed high iron content (8,180 mg/kg), phosphorous (972 mg/kg), and sulfur (52,000 mg/kg). Water added in equal parts to asphalt binder from Tank B near the shell-floor interface was filtered and analyzed using the same methods. The leachate contained sulfate ranging from 620 to 6,600 mg/L and 71 to 2,560 mg/kg iron.

To demonstrate 1) the liquid phase is not water and 2) illustrate the acidic liquid's corrosive effect, a coupon of Tank B's carbon steel was submerged in the liquid collected from the floor near the shell. The carbon steel clearly shows evidence of severe corrosion (Fig 4).

The corrosive effects of the acidic asphalt binder and liquid phase were observed from floor to near the ceiling inside of Tank B. For comparison, the inside of Tank A had black, coated walls which are normal and expected. The loose scale on the walls inside Tank B were sampled and analyzed by energy dispersive x-ray spectroscopy (EDS). The light yellow powder residue from the interior tank walls contained 7% to 12 wt% sulfur and 88% to 93 wt % iron; the white residue contained 11% to 12wt% sulfur and 87% to 89wt% iron. Iron sulfate (FeSO₄) is a known corrosion product from the reaction between sulfuric acid and carbon steel.

Based on discovery documents, literature and the results of analysis of samples collected from Tank B, the source or origin of orthophosphate (PO₄³⁻) inside Tank B is polyphosphoric acid (PPA). The presence of the orthophosphate, even after six years, is evidence of poor mixing when blended. The sulfate (S042-) is a product from the reaction between some polyphosphoric acid and asphalt binder. The iron metal detected in the liquid comes from the carbon steel tank and confirms the acidic liquid is reacting as a corrosive in contact with the Tank's steel floor and shell. These reactions are summarized by:

$$Asphalt(AsB) + PPA \longrightarrow (PPA - AsB) + PPA \tag{1}$$

$$PPA + air \longrightarrow n(H_2PO_4) \longrightarrow 3H^+ + PO_4^{3-}$$
 (2)

PPA + AsB
$$\longrightarrow$$
 (PPA – AsB)+ H_2SO_4 (3)
 H_2SO_4 + steel \longrightarrow Fe²⁺ + 2H⁺ + SO_4^{2-} (4)

Equation 1 illustrates poor mixing or blending of PPA with the asphalt binder (AsB) to be modified. Poor mixing results in a heterogeneous mixture — modified asphalt binder (PPA-AsB) and PPA. Since it is not stored under inert conditions or nitrogen blanket, the unreacted, incorrectly mixed PPA continues to decompose to orthophosphoric acid (Equation 2). Equation 3 shows the preferential reaction between PPA and the sulfoxide constituents of asphalt. Equation 4 is corrosion of carbon steel.

The source of the acidic liquid in Tank B is not the firefighting foam additive applied to the containment areas after the fire on October 20, 2009. VST FireCool is water-based and water-soluble fire fighting foam additive used at the terminal. FireCool is a clear, slightly viscous liquid with a mild detergent characteristic odor that contains mostly water, ethylene glycol monobutyl ether, polyalkyleneoxide modified polymethlysiloxane, polyalkylene oxide and polyacrylic acid. Five gallon plastic pails of firefighting foam additive are typically diluted to 3% to 6% and applied from standard equipment at 90 psi to 150 psi.

Two soil samples from the Tank B containment areas and one soil sample from the berm were collected and analyzed. The pH of the soil samples ranged from 7.33 to 7.62. None of the soil samples had detectable phosphorous metal or anions.

Marathon collected identical samples of the liquid as early as March 26, 2010. Assuming they analyzed the material by a minimum IC/ICP and pH, it is unclear why they have not taken responsibility for the hazardous contents inside Tank B which no one disputes and is clearly their product.

Pl.'s Mot. to Preclude Testimony of Dr. Elizabeth Buc, Ex. A, Buc Preliminary Report at 9-14.

Dr. Buc then explained the failure mechanism as follows:

Asphalt has been used for thousands of years as a waterproofing material and a corrosion resistant coating for metals. However, there is evidence of corrosion inside Tank B. Figure 9 is a schematic drawing illustrating the quantity of acidic liquid as a function of distance imposed over a profile of the tank shell-floor and foundation. In API 653 *Tank Inspection, Repair, Alteration and Reconstruction*, the area of the tank floor extending 3 inches from the shell is considered a critical zone. Aside from the blisters toward center of the tank, acidic liquid was found in large volumes and lowest pH at location of the shell and extended to 24 inches away the shell. The perforations in the floor plate were within this 24 inch distance and therefore in the region where there was acidic liquid at the floor. The liquid was observed to run or flow freely at ambient temperatures and would be expected to flow freely or drain

out perforations in the floor and saturate the underside or tank bottom. Tank B was dormant (i.e., not heated) from August to March or seven months. Through-floor pits provided a conduit for the release of acidic liquid to the underside of the tank and causing corrosion on the bottom side.

Id. at 17-18.

Dr. Buc also reviewed literature on PPA-modified asphalt and pointed to a 2005 publication from the Asphalt Institute that indicated that the blended product could revert to its original state. She cited a study showing that PPA reacted with residual water in asphalt to form orthophosphoric acid, and another report from 2009 that stated that "the reactivity of bitumen towards acids is still not completely understood' and earlier acid modification processes 'did not get industrial success because of the corrosion problem involved with manipulating such products and their reaction byproducts." *Id.* at 19-20.

In a supplemental report, Dr. Buc described the examination of all of MMT's tanks, stating that Tank B had more pitting corrosion on the inside. She attributed the pitting to the acid attack from the blended asphalt. At her deposition, Dr. Buc testified that neat asphalt binder does not contain phosphorus, and reasoned that if no phosphorus was found in asphalt binder but is found inside the tank, she could attribute that phosphorus to polyphosphoric acid. When asked on what she based her opinion that Marathon knew that poorly mixed product was shipped to MMT, she testified that "[t]he physical evidence has . . . shown that there was free acid in the tank," Pl.'s Mot. to Preclude Testimony of Dr. Elizabeth Buc, Ex. B, Buc dep. at 81, and that she relied on the presence of orthophosphate in the acidic liquid in the samples taken from Tank B, *id.* at 252. When asked if she had performed any tests to validate her equation for the mixing of PPA with asphalt binder, she testified that she had not attempted to blend asphalt binder and PPA or observed large scale blending of PPA with asphalt binder, but she had "reviewed the . . . peer-reviewed literature

in a variety of chemical-based journals in addition to what has been proposed or studied by the asphalt industry as well as the PPA industry." *Id.* at 143.

Dr. Buc testified that she believed the origin of the fire "was the coil pack in Dike C. The cause was the hot surface ignition of asphalt-binder-saturated vegetation on an exposed coil." *Id.* at 11. The coil pack was "composed of carbon steel tubes welded together in three tiers in a welded frame structure that contained a heat transfer oil, and each coil was controlled by a valve." *Id.* at 12. She further testified that HM Environmental "did not close or control the temperature of the coils as [HM Environmental] were coming out of the asphalt binder which served as the ignition source." *Id.* at 13. She believes that the coils, once exposed to air, became hotter and ignited the vegetation in direct contact with the coil pack, which included grass, wood, and a shovel handle. *Id.* at 13-14. Buc testified that, after the fire, much of the asphalt on the ground was covered in water, *id.* at 47-48, and did not appear to be worth recovering based on its "pillowed" appearance, *id.* at 51.

Marathon argues that Dr. Buc's theories have multiple gaps. First, it says that Dr. Buc assumed that unreacted PPA can be formed by improper blending, exist in a stable state in the blending tank and throughout the transfer process, and remain in unreacted form in Tank B for considerable time, despite activity of the tank through multiple deposits and extractions of large amounts of hot liquid asphalt. Marathon argues that she performed no test to confirm that that could even occur, nor has she confirmed her assumptions with other experts. Second, Marathon argues that Dr. Buc's opinions are dependent on the assumption that the unblended PPA mixed with water inside Tank B, but that she must have speculated that there were multiple origins for such water and offered no opinion as to how long the water existed in the tank prior to the rupture and completely disregarded evidence that water cannot exist in a tank heated to 300°F. Third, Marathon contends

that Dr. Buc's theory that presence of orthophosphate establishes existence of unblended PPA is nothing more than a bare assertion, based solely on her own untested theorizing. Fourth, Marathon argues That Dr. Buc's opinion that the liquid within Tank B existed or was corrosive before the spill is speculative. Fifth, Marathon states that Dr. Buc's assertions that Marathon was responsible for the fire because it was Marathon's asphalt binder that was on the ground and therefore no fire would have occurred if recovery efforts had not been needed, does not emanate from any specialized knowledge.

The defendants counter those arguments by referencing the nearly 90 hours Dr. Buc spent on the fire investigation at MMT's terminal, which included site work, evidence collection and examination, literature review, and laboratory analyses. The defendants say that Dr. Buc also spent 374 additional hours on the post-fire quality of asphalt on the ground and rupture loss investigation starting in November 2009. Of those, the defendants say that she spent approximately 169 hours inside Tank B and on the independent laboratory examination of the steel from the failure location. Dr. Buc collected nearly 80 samples of debris representative of what was embedded in the asphalt in the dikes after the fire; asphalt from the coil pack and dikes; concentrated firefighting foam on-site after the fire; steel, asphalt binder, acidic liquid, solid residue and acid-saturated asphalt binder from inside Tank B. Dr. Buc also witnessed and documented the excavation of asphalt binder from inside Tank B, the extraction of the failure location and the third-party sampling of asphalt binder and acidic liquid inside Tank B and asphalt binder from Tank A in December 2010; and she witnessed and documented the results of the API 653 inspections of Tanks A, B, C and 109 conducted by Team Industrial and Tank Consultants, Inc. (TCI).

The defendants also argue that Dr. Buc relied on recognized principles of chemistry and metallurgy when performing her tests and reasoning to her conclusions. They contend that Dr. Buc based her conclusions on her investigation and the physical evidence. They also assert that Dr. Buc used literature from sources recognized in the field and rested her conclusions on basic and accepted scientific principles.

Any challenge to expert testimony must begin with Rule 702 of the Federal Rules of Evidence, which was modified in December 2000 to reflect the Supreme Court's emphasis in *Daubert v. Merrell Dow Pharmaceuticals., Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), on the trial court's gate-keeping obligation to conduct a preliminary assessment of relevance and reliability whenever a witness testifies to an opinion based on specialized knowledge. Federal Rule of Evidence 702 states:

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.

The language added by the amendment to Rule 702 restates *Daubert*'s insistence on the requirements that an expert's opinion be based on a foundation grounded in the actual facts of the case, that the opinion is valid according to the discipline that furnished the base of special knowledge, and that the expert appropriately "fits" the facts of the case into the theories and methods he or she espouses. *See Daubert*, 509 U.S. at 591-93.

In addition, expert testimony is not admissible unless it will be helpful to the fact finder.

Such testimony is unhelpful when it is unreliable or irrelevant, as the Court observed in *Daubert*,

see id. at 591-92, and also when it merely deals with a proposition that is not beyond the ken of common knowledge, see, e.g., Berry v. City of Detroit, 25 F.3d 1342, 1350 (6th Cir. 1994) ("If everyone knows this, then we do not need an expert because the testimony will not 'assist the trier of fact to understand the evidence or to determine a fact in issue.") (quoting Fed. R. Evid. 702). Finally, before an expert may give an opinion, the witness must be qualified to do so. See id. at 1348-50; Morales v. Am. Honda Motor Co., Inc., 151 F.3d 500, 516 (6th Cir. 1998). The proponent of expert testimony must establish all the foundational elements of admissibility by a preponderance of proof. Nelson v. Tenn. Gas Pipeline Co., 243 F.3d 244, 251 (6th Cir. 2001) (citing Daubert, 509 U.S. at 592 n.10).

An opinion is "reliable" from an evidentiary standpoint if it is "valid" according to the discipline upon which it is based. *See Daubert*, 509 U.S. at 590. In determining validity, the Court's focus is on principles and methodology, not results. And there is no precise formula by which a court might deem a methodology "acceptable" or "unacceptable." *Daubert* and its progeny have therefore not created a "straitjacket," *Gross v. Comm'r*, 272 F.3d 333, 339 (6th Cir. 2001), but rather counsel a flexible approach, reconciling the "liberal thrust" of Rule 702 which "relax[es] the traditional barriers to opinion testimony" with the responsibility to "screen[] such evidence" in order to keep unreliable or invalid opinions from the jury. *Daubert*, 509 U.S. at 588-89; *see also Jahn v. Equine Servs.*, *PSC*, 233 F.3d 382, 388 (6th Cir. 2000). "Although there is no 'definitive checklist or test' to strike th[e] balance ['between a liberal admissibility standard for relevant evidence . . . and the need to exclude misleading junk science'], the *Daubert* Court set forth factors relevant to the inquiry: (1) whether the theory or technique can be or has been tested; (2) whether it 'has been subjected to peer review and publication'; (3) whether there is a 'known or potential rate

of error'; and (4) whether the theory or technique enjoys general acceptance in the relevant scientific community." *Pluck v. BP Oil Pipeline Co.*, 640 F.3d 671, 677 (6th Cir. 2011); *see also Newell Rubbermaid, Inc. v. Raymond Corp.*, 676 F.3d 521, 527 (6th Cir. 2012). Other factors may play a role as well. *See Zuzula v. ABB Power T & D Co.*, 267 F. Supp. 2d 703, 712-13 (E.D. Mich. 2003).

"[R]ejection of expert testimony is the exception, rather than the rule, and [the court] will generally permit testimony based on allegedly erroneous facts when there is some support for those facts in the record. *In re Scrap Metal Antitrust Litigation*, 527 F.3d 517, 530 (6th Cir. 2008) (internal quotations and citations omitted).

In attacking Dr. Buc's opinions on the cause of the tank failure, Marathon relies heavily on the Sixth Circuit's decision in *Tamraz v. Lincoln Electric Company*, 620 F.3d 665 (6th Cir. 2010). In that case, the plaintiff exhibited the symptoms of Parkinson's Disease, and his physicians offered the opinion that he suffered from "manganese-induced parkinsonsim" that he incurred when working as a welder and was exposed to the defendants' products. The court of appeals held that the doctor's testimony should not have been admitted at trial because it was based at most on a working hypothesis that itself was the product of a chain of inferences that themselves were grounded in speculation instead of the facts of the case. Plausible though it was, the court could not accept the conclusion that the magnesium in the defendants' products caused the plaintiff's symptoms. *Id.* at 670-71 (asserting that "[t]he final step required a leap of faith as well, even ignoring the jumps required to get there. That manganese *could cause* Parkinson's Disease in someone like Tamraz does not show that manganese *did cause* Tamraz's Parkinson's Disease"). The court viewed the opinion as the last step in a chain of inferences that were each based on some measure of

speculation, concluding that "[a]t some point, the train becomes too long to pull and the couplings too weak to hold the cars together." *Id.* at 672.

Marathon attempts to draw several parallels from the lesson in *Tamraz* to the present case. It challenges Dr. Buc's conclusions on the cause th the tank failure on the grounds that she did not perform independent testing to verify that (1) any unmixed PPA would have remained unmixed after being transported from the mixing facility to MMT's tanks; (2) the PPA-modified asphalt could absorb enough moisture from ambient air to account for the aqueous phase found in the tanks; (3) the water could have existed in Tank B; and (4) the presence of orthophosphate establishes the existence of unblended PPA. Marathon put it best when it contended that Buc's opinions are speculations regarding one scenario that could possibly support her theory and that she did nothing to validate her hypothesis except test the aqueous phase for the presence of orthophosphates, but even that test does not account for studies that show phosphate leeches out of PPA-modified asphalt when the asphalt sits under water for long periods of time.

The Court believes, however, that Marathon's argument oversimplifies matters. Dr. Buc discovered an aqueous phase underneath the asphalt — between the asphalt and tank floor — and discovered that it contained orthophosphates and had an acidic pH. That aqueous phase was not exposed to the ambient air, the firefighting foam, or rain. Even if the aqueous phase had been exposed to the firefighting foam, the foam does not contain any phosphorous compounds. Similarly, neat asphalt — asphalt *not* modified with PPA — does not contain phosphorous compounds. Dr. Buc tested both the aqueous phase found underneath the asphalt and the aqueous phase on top of the asphalt. According to her test results, the aqueous phase underneath the asphalt had a low pH and contained orthophosphates, and the aqueous phase on top of the asphalt, which was exposed to the

firefighting foam and rain, had a nearly-neutral pH and did not contain orthophosphates. Based on the corrosion patterns of the tank and the presence of aqueous phase containing orthophosphates under the asphalt, Dr. Buc concluded that the orthophosphates found in the lower aqueous phase had but one source: the PPA.

Marathon argues that Dr. Buc never tested her theory by attempting to blend neat asphalt with PPA to see when and if orthophosphate can be found and whether orthophosphates would be found even if the two were mixed correctly. Marathon also argues that there is no indication in the record that other experts use Dr. Buc's orthophosphate theory to determine the quality of an asphalt blend or to distinguish between well-blended and poorly-blended asphalt. Marathon's arguments ignore the fact — which Dr. Buc drew from the literature — that orthophosphates would not be present in 100% blended asphalt.

On that score, Dr. Buc's theory is a plausible one. PPA is hydrophilic and will absorb water if exposed to any sort of moisture, including moisture in ambient air. Marathon's PPA-modified asphalt was not mixed under inert conditions, e.g. in a nitrogen blanket; therefore, the PPA will have absorbed some amount of moisture. Tank B, which contained PPA-modified asphalt, was inactive for quite some time, perhaps long enough for the moisture to react with the PPA and its byproducts to create an aqueous phase that would corrode the tank's flooring. That theory is quite plausible. But Marathon argues that Dr. Buc's theory is not based on sufficient testing and literature so as to ground her opinion in knowledge and not speculation. The Court disagrees. Dr. Buc's opinion is pushed from speculation to knowledge by the fact that the Material Safety Data Sheet for PPA-modified asphalt indicates that it should have a neutral pH and zero orthophosphates. The presence of orthophosphates and a low pH aqueous phase under the asphalt lends credence to Dr. Buc's

conclusion that the PPA and the asphalt were improperly blended. And that conclusion is based on the results of repeatable experiments. Although Dr. Buc has not conducted experiments to verify every single step of her proposed chain of events, the possibilities are limited by the fact that PPA was the only possible source of phosphorous and the aqueous phase found under the asphalt was not exposed to the elements, and supported by the fact that the PPA was mixed under ambient conditions. Although Dr. Buc's investigation, report, and conclusions were provoked by litigation — most cause-and-origin-type opinions usually are — the Court does not find that any of the "red flags" are present here in sufficient size to signal danger with the acceptability of Dr. Buc's opinion on the cause of the tank rupture. *See Best v. Lowe's Home Ctrs., Inc.*, 563 F.3d 171, 177 (6th Cir. 2009) (observing that red flags that caution against certifying an expert include reliance on anecdotal evidence, reliance on temporal proximity, lack of sufficient information about the actual case, improper extrapolation, failure to consider other possible causes, lack of testing, and subjectivity).

The Court will deny Marathon's motion to exclude Dr. Buc's opinions on the cause of the failure of Tank B. Of course, Marathon's expert will be free to testify at length about all the reasons why he believes that Dr. Buc is wrong.

Dr. Buc's opinion on the cause of the later fire is another matter. Her opinion that Marathon caused the fire is not based on scientific, technical, or specialized knowledge. During her deposition, Dr. Buc explained that Marathon caused the fire because it was Marathon's asphalt binder on the ground and no fire would have occurred but for the spill. That type of Palsgrafian reasoning — perhaps as logical as it might sound — is not within the scope of expert testimony under Federal Rule of Evidence 702. The Court will grant Marathon's motion to exclude Dr. Buc's testimony on the cause of the fire.

B. Marathon's motion to exclude expert Joel Huffman [dkt. #131]

The defendants retained Joel Huffman as a testifying expert to perform a metallurgical evaluation, find the failure location inside Tank B, and give an opinion on the cause of the failure. Mr. Huffman works for Lake Superior Consulting (LSC). He earned a bachelor of science degree in metallurgical engineering from Michigan Technological University in 1991. He has worked as a metallurgical engineer since 1991, focusing on field and laboratory failure investigation of components in the oil and natural gas transmission pipeline industry. He is an active member of the National Association of Corrosion Engineers (NACE) and has participated on a number of committees, including specification writing for the document, *Techniques for Monitoring Corrosion*— *Field Experience*.

Mr. Huffman attended an inspection of Tank B in April 2010 and prepared a report for LSC. The report describes his observations and his view of the rupture site. His report is detailed; he reached the following conclusions:

- 1. The rupture of Tank B was caused by the failure of the floor plate at the toe of the fillet weld that attached the tank floor and the sketch plate to the tank shell.
- 2. Localized corrosion on both the top and bottom side surfaces of the tank floor compromised the strength of the floor at the toe of the fillet weld.
- 3. The failure at the toe of the fillet weld was not a result of a weld defect
- 4. A strong acid was present in Tank B, which is constructed of low carbon steel.
- 5. The top side floor corrosion was caused by the presence of a strong acid inside the tank.
- 6. Numerous perforations of the tank floor were present in the area near the rupture site, which would allow the release of acid to the tank underside.
- 7. The bottom side floor corrosion was accelerated at the failure location by acidic material that migrated out of the tank through perforations In the floor.

Pl.'s Mot. to Preclude Testimony of Joel Huffman, Ex. A, January 10, 2011 Report at 9.

On the way to these conclusions, Mr. Huffman wrote the following:

Based on information received, the material that was stored in Tank B is commonly known as a modified asphalt binder. This asphalt binder is modified with PPA, or poly phosphoric acid. On-site assessments and laboratory analyses support that a transparent liquid having a very low pH (ie. < 3) remained in the tank bottom. The laboratory analyses of this acidic fluid indicate that it contains sulfate and orthophosphate anions. The source of this liquid is understood to be a result of poor mixing of the PPA and asphaltic binder.

In the absence of the acidic component, the asphalt binder . . . would be expected to protect the internal surfaces of the tank. "The coal tars and the epoxymodified coal tars are especially useful as coatings on the bottoms of tanks" (Corrosion of Metal Processing Equipment: Corrosion Protection for Steel Tanks, 1992). Therefore, pitting type corrosion inside an asphalt binder tank is not normal or expected.

Based on the evidence obtained from materials during the on-site and the laboratory investigations, the rupture of Tank B was caused by the presence of a strong acid in the carbon steel tank. The acid caused localized pitting of the top side of the tank floor, as well as other internal steel surfaces. "Pitting is a very serious type of corrosion damage because of the rapidity with which metallic sections might be perforated." (Localized Corrosion: Pitting Corrosion, 1992). Pitting ultimately penetrated the tank floor and allowed internal contents of the Tank B (asphalt binder and acid) to migrate into the tank pad under the floor. The fugitive acid combined with moisture in the areas near the tank floor penetrations resulting in accelerated attack from the bottom side of the tank floor. This localized effect can be seen in the evidence near the rupture site. The floor thickness ranges from 0.0" locally at and adjacent to the rupture to almost 0.2" within a few feet of the rupture.

Id. at 7-8. Mr. Huffman submitted a supplemental report in February 2012 that elaborates on his conclusions.

Marathon argues that Joel Huffman should be precluded from testifying and his report and opinions should be excluded because they based on the unfounded and unsubstantiated beliefs of another proffered expert, Elizabeth Buc, and because Huffman's testimony, report, and opinions are not the product of reliable principles or scientific methodology. Marathon's only real argument is

that Huffman cannot say with any degree of scientific certainty that the acidic liquid was present in Tank B before the spill. Huffman did not formulate his own opinion on how acid might have gotten into the tank or how long it had been there. Rather he relied on Dr. Buc's opinion that the acidic liquid was a result of improperly mixing the PPA into the asphalt. Marathon argues that where one expert's testimony relies on the opinions of a second expert, the Court must ensure that the second expert's opinions provide a reliable foundation for the first expert's testimony.

The Court is satisfied that Mr. Huffman's opinions are admissible under Federal Rule of Evidence 702. The Court has found already that Dr. Buc's opinions on Tank B's failure will be received in evidence. Marathon's argument that Mr. Huffman's opinions are dependent on Dr. Buc's conclusions does not undermine the bases of Huffman's conclusions, because the first domino did not fall.

Moreover, Mr. Huffman reached his own conclusions on the cause of the tank failure mostly based on his own observations and inspections. He was not retained to opine on how acid got into the tank. Rather, he was retained to perform a metallurgical evaluation of the failure location inside Tank B to determine the cause of failure, which he did. The results of his tests revealed that a strong acid caused pitting and corrosion, and the pitting and corrosion eventually led to the rupture. The acid's presence in Tank B before the rupture is supported by Huffman's discovery of acidic liquid trapped underneath the remaining asphalt. During the April 15, 2010 on-site inspection, Huffman drilled small holes into the shell of the tank from the outside to see how much of the acidic liquid existed below the remaining asphalt product. The transparent acidic fluid trickled from the holes, and on-site tests revealed that the liquid had a pH of 2 to 3.

Dr. Buc's opinions on PPA and water in Tank B are irrelevant to Huffman's opinion that an acid caused Tank B's failure. Huffman might go too far if he were to testify that Marathon's PPA-modified asphalt caused the spill; it appears that the mechanism by which acid got into Tank B is outside his area of expertise. But Huffman can reliably testify as to what caused Tank B's failure. Marathon has not attacked Mr. Huffman's principles and methodology, nor can it because they are based on solid science. Marathon's only attack on Mr. Huffman's testimony is that he relied on Dr. Buc's opinion that water and acid existed in Tank B, and that argument must fail.

C. Marathon's motion to exclude damages expert James Paskell [dkt. #132]

MMT alleges that Marathon is responsible for MMT's lost business income, expenses associated with the remediation efforts after the spill and fire, and future expenses that MMT claims are necessary to return part of its facility to service. MMT retained James D. Paskell to offer an opinion on MMT's damages. Marathon argues that his opinions are inherently unreliable because they are based almost exclusively on the unverified representations of MMT and its employees; Mr. Paskell performed little, if any, independent analysis to support his conclusions; and he made a number of critical assumptions without any basis in fact. Therefore, Marathon argues, Mr. Paskell's damages opinions must be excluded because they are not founded on reliable data or information.

To formulate his opinions, Paskell states that he reviewed MMT's business records, invoices, correspondence and other internal documents. He also consulted with Alicia Krall, MMT's Vice President; Curt Robinson, MMT's Operations Manager; and Monica Adkins, MMT's Chief Financial Officer. Based on his document review and consultations, and his assumption that Marathon was fully responsible for the tank failure and the fire, Paskell opined that:

MMT's damages are properly measured by an award of lost business income and additional expenses stemming from Marathon's actions causing the rupture of Tank

B and subsequent damage to MMT's facility, Marathon's cancellation of the Terminaling Agreement, and MMT's subsequent inability to lease [] five (5) tanks to Marathon or any other customer.

Pl.'s Mot. to Preclude Testimony of James Paskell, Ex. A, December 31, 2010 Report at ¶17. Paskell separated MMT's damages into three categories: (1) lost business income; (2) additional expenses incurred in response to the spill and fire; and (3) potential future expenses. In total, Paskell opined in his initial report that MMT's damages amounted to \$25,111,418.

Paskell calculated lost business income by "estimating the overall profit the enterprise would have achieved but for the [spill and fire] and comparing it to the overall profit the enterprise actually achieved." *Id.* ¶18. Paskell initially analyzed "MMT's terminal rental income capability" from the date of the spill to December 31, 2010, the date of Paskell's report. *Id.* ¶20. Marathon argues that in doing so, Paskell made several unsubstantiated assumptions. First, Paskell assumed that MMT would have fully leased its storage tanks and that Marathon would have continued leasing five storage tanks under the terms of the Terminaling Agreement, as amended. *Id.* In addition, Paskell assumed that MMT would have built a new storage tank and rented it to Marathon for \$55,574.40 per month from October 2009 to the date of the report. *Id.* Paskell then deducted costs from the rental income, which he defined as "costs that would be incurred in the ordinary course of owning and operating the terminal, and associated with business activities." *Id.* ¶22. He also purported to account for certain costs saved as result of MMT's decreased operations. That process led Paskell to conclude that MMT's lost business income from May 21, 2009 to the date of the report was \$3,681,875.

Paskell calculated MMT's additional expenses by adding the costs that MMT claimed from responding to the spill and fire, repairing, replacing or restoring damaged property, and providing

heating and cleaning services to Marathon. Paskell concluded that MMT incurred \$2,898,276 in additional expenses.

Finally, Paskell calculated MMT's potential future expenses based solely "on estimates obtained and prepared by Mr. Curt Robinson," an agent of MMT. Pl.'s Mot. to Preclude Testimony of James Paskell, Ex. A, Paskell Report at ¶ 27. Relying on MMT's own estimates, Paskell concluded that "MMT can expect to incur an additional \$18,531,276 in investigation costs and restoration costs for the tanks and related property, plant and equipment." *Ibid*.

Paskell also prepared a supplemental report that was served on Marathon in November 2011.

Paskell revised downward his damages estimate in substantial amounts, mostly by eliminating estimates and contingencies based on assumptions that had not come to pass since the first report was issued. His revised damage calculation was around \$13 million.

Marathon attacks each of the separate components of Mr. Paskell's damage estimation. First, it contends that his opinion on future damages in inadmissible because it is based only on a speculative assumption of MMT's future conduct, not on reliable facts or data. For instance, Marathon criticizes Paskell's inclusion of costs both to repair and replace the damaged tanks, which amounts to doubling. He accounted for lease income from a tank — identified as Tank 101 — that was to be constructed and leased to Marathon when that tank had not been finished or approved by Marathon. He based some of his income and expense estimates on Curt Robinson's estimates, although those were based in turn on price quotes and proposals from contractors. He included a fifteen-percent contingency amount in the estimate of the cost of repairing the facility. Marathon cites *Multimatic, Inc. v. Faurecia Interior Sys. USA., Inc.*, 359 F. App'x 643 (6th Cir. 2009), in support of the rule that opinions on future damages cannot be speculative. The plaintiff's expert in

that case based an estimate of future damages on an assumption that a customer might extend a supply contract well beyond its termination date when there was no basis to conclude that it would. Nor did the expert conduct research into the historic profit margins in the industry and only speculated about what the plaintiff's profit margins would be on "yet-to-be-signed contracts years into the future." *Id.* at 654. That lapse caused the court of appeals to affirm the exclusion of the expert's opinion as unreliable.

Marathon also cites *Mercedez Benz, U.S.A., L.L.C. v. Coast Auto*, 2006 WL 2830962 (D.N.J. 2006), where the defendant car dealership claimed that the plaintiff refused to provide the number of cars called for under the plaintiff's dealer-allocation model as punishment for the defendant's failure to participate in an alleged price-fixing scheme. The defendant proffered an expert to testify about damages resulting from the plaintiff's failure to allocate cars, but the court found that the expert's testimony was unreliable because there was no foundation for his assumptions. For instance, the expert did not examine the circumstances surrounding the defendant's operation or analyze what constituted a proper vehicle allocation, or consider any other factors impacting the defendant's allocation, such as its actual allocation records and actual sales, which had a material impact on future allocations. Instead, the expert relied entirely on the defendant's unverified representation, without any independent analysis, that the allocations it received were unfair, and assumed that the allocations should have increased at the rate of all other dealer allocations in the area.

Marathon also criticizes Mr. Paskell's opinions because he did not independently verify Curt Robinson's estimates, he made unwarranted assumptions as to MMT's future income and expenses,

he disregarded payments MMT received from insurance proceeds, and he did not distinguish the damages that were caused by the tank rupture from those caused by the subsequent fire.

The defendants counter that future damages need not be calculated with precision. They reference the *Multimatic* court's statement that a permissible estimate of future damages can be "speculative to some degree." *Multimatic*, 358 F. App'x at 650-51. They point out that in addition to Curt Robinson's statements, Paskell also relied upon dozens of pages of supporting documentation, including specific estimates from contractors who would likely be retained to perform the repair work. The defendants argue that Paskell's reliance on estimates by industry professionals is appropriate and distinguish *Multimac* on the basis that the repair quotes, even if the contractors had not yet been engaged, were a far cry from the "yet-to-be-signed" contracts in the earlier case. There is no question that the repairs are needed, and therefore estimates from contractors are a sufficient basis for the opinion.

The defendants also argue that Mr. Paskell's reliance on Curt Robinson is appropriate, since "it is not uncommon for an expert to rely on data presented by the party who hired him as a basis of his expert analysis." *Popovich v. Sony Music Entm't, Inc.*, No. 02-359, 2005 WL 5990223, at *3 (N.D. Ohio May 9, 2005). The defendants discount Marathon's suggestion that Robinson is unqualified, observing that it is hard to imagine anyone more qualified to understand MMT's facility and business needs than the personnel who have spent every day of their professional lives, some for decades, operating it.

The defendants also state that Mr. Paskell updated and refined his calculations based on the facts, circumstances, and documentation developed through continuing investigation. Throughout his Preliminary Report and deposition, Paskell indicated that investigation into the repairs necessary

to restore MMT's facility was ongoing, and that he would update his analysis to reflect the emergence of additional facts and related documentation as they became available, which, the defendants maintain, is what he has done in his supplemental report. That accounts for Paskell's revision his future costs analysis by substituting repair costs for replacement costs. It also is the basis for eliminating the contingency component from the repair estimates. On the question of loss of future income, the defendants distinguish two cases relied upon by Marathon, *US Salt, Inc. v. Broken Arrow, Inc.*, 563 F.3d 687, 690 (8th Cir. 2009), and *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549, 567-70 (D.C. Cir. 1993), by noting that Paskell based his assumptions on a signed contract with Marathon, as well as almost two years of prior operating experience with Marathon under that contract, whereas the expert in *US Salt* had no "written commitments from any customer as to the price it would pay," *US Salt*, 563 F.3d at 690, and the expert in *Bell Helicopter* assumed the plaintiff would have changed careers based on one discussion the plaintiff had with his wife.

The defendants also mount a point-by-point rebuttal of the various items of repair expenses claimed by MMT, and contend that in the end, those items might be the subject of argument at trial, but they do not render the damages opinion inadmissible. Similarly, the defendants rebuke Marathon's challenge to Paskell's reliability based on his failure to reduce his damages figures for proceeds MMT received from its insurance carrier on the grounds that Paskell measured the total damages caused by Marathon's misconduct, not the allocation of the damages between MMT and its insurer, and any sums MMT recovered by insurance reimbursement may have to be repaid to the insurance company because of its subrogation rights.

Marathon, in reply, says that the Court should not allow the defendants to rely on Mr. Paskell's supplemental report because it was furnished late, and it amounts to nothing more than an admission that the methodology he used in his initial report was flawed.

The motion papers and exhibits relating to Mr. Paskell's damages conclusions are voluminous. After wading through them, it appears that what happened is as follows: Paskell produces what appears to be a somewhat reliable report that contains a few cost estimates that might be based on speculation, including the lease of Tank 101, and a double charge for both repairing and rebuilding the damaged tanks, and costs that MMT's insurer already paid. Marathon filed its motion *in limine* to exclude Paskell's testimony; the motion that pointed out some of the shakier parts of his report. Two months later, Paskell filed a supplemental report that corrected a number of the errors that Marathon pointed out, and substituted new information on costs actually incurred for those that had been estimated at the time of the first report. Paskell's supplemental report pegs MMT's damages at \$13,091,140, which amounts to a \$12,020,278 reduction from the original report, most of which comes from not having to rebuild three tanks, which can be repaired, according to the API inspection reports that came in since the first damages opinion was rendered.

Federal Rule of Civil Procedure 26(e)(2) requires a party to supplement its expert's report "by the time the party's pretrial disclosures under Rule 26(a)(3) are due." Rule 26(a)(3) disclosures were due in this case on November 21, 2011. Am. Case Management and Scheduling Order [dkt. #127]. Marathon's lawyer submitted an affidavit in which she avers that she did not receive a copy of Paskell's supplemental report until receiving the defendants' response to Marathon's motion to exclude Paskell's opinion. The defendant's response was filed on November 30, 2011, nine days after the Rule 26(a)(3) disclosure deadline. As noted elsewhere in this opinion, "[i]f a party fails

to provide information . . . as required by Rule 26(a) or (e), the party is not allowed to use that information . . . to supply evidence . . . at a trial, unless the failure was substantially justified or is harmless." Fed. R. Civ. P. 37(c)(1).

"District courts have broad discretion to exclude untimely disclosed expert-witness testimony," particularly when these reports serve as a 'transparent attempt to reopen' the *Daubert* inquiry after the weaknesses in the expert's prior testimony have been revealed. *Pluck v. BP Oil Pipeline Co.*, 640 F.3d 671, 681 (6th Cir. 2011) (quoting *Pride v. BIC Corp.*, 218 F.3d 566, 578-79 (6th Cir. 2000)); *see also Matilla v. South Kentucky Rural Elec. Co-op. Corp.*, 240 F. App'x 35, 43 (6th Cir. 2007) (citing *Primus v. United States*, 389 F.3d 231, 234-36 (1st Cir. 2004) (holding that the district court properly excluded supplemental expert evidence where plaintiff had been granted multiple discovery extensions, had filed the supplemental disclosures months after the deadline, and the supplemental information was cumulative of other expert evidence); *Nicholas v. Pennsylvania State Univ.*, 227 F.3d 133, 148 (3d Cir. 2000) (affirming exclusion of supplementary Rule 26 disclosures where plaintiff inexcusably delayed such disclosures, which would have necessitated substantial additional preparation and might have delayed trial)).

However, even if the defendants did not serve their report on November 21, as they say they did, their failure to timely supplement Mr. Paskell's expert report is harmless. Marathon was fully apprised of the contents of Paskell's report. The only things that have changed since the initial report are that Paskell has modified his calculations downward to remove costs that were not supported by proper documentation, he removed estimated cleanup and repair costs from the additional expenses and replaced them with actual costs, he updated the lost income figures, and he removed the costs to build three new tanks because the API inspections (conducted after the initial

report was completed) revealed that they could be repaired instead of rebuilt. Because the defendants' failure was harmless, the Court will not exclude Mr. Paskell's supplemental report based on its untimeliness.

Paskell's supplemental report addresses many of the concerns laid out in Marathon's motion.

Only two meaningful issues remain: the estimated lease income from Tank 101, and set-offs for insurance payments.

Marathon argues that it is inappropriate to consider lost income from Tank 101 because it has not been finished yet and there is no way to determine if it would pass Marathon's inspection.

The Sixth Circuit has explained the amount of certainty required for future damages this way:

Under Michigan law . . . a plaintiff cannot recover damages "based on mere conjecture or speculation." *Sullivan Indus., Inc. v. Double Seal Glass Co., Inc.*, 192 Mich. App. 333, 480 N.W.2d 623, 632 (1991). Yet damages calculations with a "reasonable basis of computation" clear this hurdle even though the results are "only approximate," *Waskin Dev. Co. v. Weyn*, 369 Mich. 121, 119 N.W.2d 662, 665 (1963), and "speculative to some degree," *Lorenz Supply Co. v. Am. Standard, Inc.*, 100 Mich. App. 600, 300 N.W.2d 335, 340 (1980).

Multimatic, 358 F. App'x at 650-51. Experts may not assume facts without some support for those assumptions in their expert report or elsewhere in the record. *See McLean v.* 988011 Ontario, Ltd., 224 F.3d 797, 801 (6th Cir. 2000).

Paskell's decision to include Tank 101's rental fee is not entirely off base. The Second Amendment to the Terminaling Agreement, effective February 15, 2007, states that Marathon will lease Tank 101 from MMT for \$34,030 for contract years 1 & 2 and for \$35,760 for contract years 3-5. The Second Amendment also provided: "Tank 101 and associated piping for asphalt service shall be incorporated into this lease only upon [Marathon]'s vetting, inspection, and approval." It appears that MMT was investigating financing for Tank 101 in May 2009, right before the spill.

Although it may be difficult to determine when Tank 101 would have been completed and passed Marathon's inspection, there is a reasonable basis to calculate a damage line item for that potential future income which renders it more than rank speculation. The likelihood of that event occurring is subject to the evidence at trial and argument of the parties. A jury is quite capable of deciding whether that income item would have reasonably eventuated.

Marathon argues that it would be unjust to allow MMT to seek damages from Marathon for repairs and losses that MMT's insurer already paid. Marathon offers the following example. In his opinion about MMT's "Additional Expenses Incurred," Paskell included a charge of \$362,381.98 for the "Balance due for asphalt removal" allegedly performed by a contractor. Def.'s Resp. to Mot. to Preclude Testimony of James Paskell, Ex. B, Suppl. Report, Item 199. But in a footnote, Paskell indicated that the work "has been directly billed and paid by MMT's insurer." *Id.* at n.2. Marathon argues that such double counting renders Paskell's opinion unreliable. The Court disagrees.

In his reports, Mr. Paskell considered the *total* damages caused by Marathon's conduct, not the allocation of damages. Moreover, Marathon's argument that it should receive a setoff for MMT's insurance recoveries ignores the possible application of the common law collateral source rule. As the Michigan Supreme Court explained, "[t]he common-law collateral-source rule provides that the recovery of damages from a tortfeasor is not reduced by the plaintiff's receipt of money in compensation for his injuries from other sources." *Tebo v. Havlik* 418 Mich. 350, 366, 343 N.W.2d 181, 186-87 (1984) (citing *Motts v. Michigan Cab Co.*, 274 Mich. 437, 264 N.W. 855 (1936), and *Perrott v. Shearer*, 17 Mich. 48 (1868)). That idea applies to insurance proceeds. "[T]he rationale for the rule is that the plaintiff has given up consideration and is entitled to the contractual benefits. The plaintiff's foresight and financial sacrifice should not inure to the benefit of the tortfeasor, who

has contributed nothing to the plaintiff's insurance coverage." *Ibid*. The parties have not addressed how or if that rule might apply here. Nonetheless, not including a setoff for insurance recoveries does not render Mr. Paskell's opinions on damages unreliable or inadmissible.

The Court finds no reason at this stage of the proceedings to prevent the defendants from offering James Paskell as an expert witness on damages. Therefore, Marathon's motion will be denied.

D. Marathon's motion to preclude evidence of TEAM Reports [dkt. #135]

Marathon has moved for an order precluding the defendants from introducing reports prepared by TEAM Industrial (TEAM), a testing company engaged by MMT that inspected four of the defendants' above-ground storage tanks, including Tank B, according to the guidelines established by the American Petroleum Institute (commonly referred to as API 653) sometime between January 15, 2011 and February 14, 2011. The Basis for Marathon's motion is the purported failure to produce those reports in response to a request for all information relied upon by Dr. Buc in formulating her opinion. It appears to be undisputed that Marathon asked in February 2011 for all documents Dr. Buc consulted. Marathon contends that it did not understand Dr. Buc to have relied on the TEAM reports until just before her deposition was taken in June 2011, a day before the close of discovery. Marathon says that it was prejudiced because it did not anticipate Dr. Buc's reliance on the reports and therefore it could not prepare adequately for Dr. Buc's deposition.

The defendants argue that any claimed prejudice is illusory because Marathon was aware of the TEAM reports in late 2010, when Marathon was involved in scheduling the inspections and setting the protocol for them. Marathon participated in all of the inspections and even commissioned its own API inspection using its own contractor, Tank Consultants, Inc. The defendants also point

out that they disclosed the TEAM reports at least three times. The first was on May 31, 2011 during the deposition of Joel Huffman, one of MMT's experts. The second was at Dr. Buc's June 2, 2011 deposition, and the third was in July 2011. The defendants argue that the first two disclosures occurred before the discovery deadline and thus were timely. The defendants argue that although discovery officially closed on June 3, 2011, the parties informally extended that period and continued to take depositions after then.

In February 2011, Marathon sent the defendants a discovery request seeking copies of all publications, data, documents, reports and any other material on which the defendants' experts relied on in rendering an opinion. The defendants argue that Marathon was aware of the reports' existence and that Dr. Buc relied on them long before they were produced at Huffman's deposition.

The defendants also argue that, even if the TEAM reports were disclosed untimely, they should not be excluded because the failure was harmless inasmuch as Marathon obtained the reports seven months before trial was initially scheduled and five months before supplemental expert reports were due. Moreover, the defendants argue, Marathon never submitted a supplemental report from its experts analyzing the TEAM reports despite the fact that the experts' supplemental reports were not due until November 21, 2011, over five months after the reports' production.

Certainly, the rules require production of materials on which an expert relies, and production must be timely. Fed. R. Civ. P. 26(a)(2)(B). In fact, the Rules require strict compliance, and sanctions can be severe. *R.C. Olmstead, Inc. v. CU Interface, LLC*, 606 F.3d 262, 271 (6th Cir. 2010) (noting that rule requires "absolute compliance"). "If a party fails to provide information or 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 on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless." Fed. R. Civ. P. 37(c)(1).

Marathon's motion presents an interesting situation. Marathon does not seek to preclude Dr. Buc from testifying because the defendants failed to provide the TEAM reports until her deposition. Rather, Marathon seeks to preclude the defendants from introducing TEAM reports and any testimony based on them. In seeking to exclude the TEAM reports, Marathon's motion is more one to exclude evidence that was not disclosed during discovery, rather than a challenge to the expert's testimony. That argument fails, however, because Marathon never moved to compel disclosure under Rule 37(a)(3)(A), and it received the reports before discovery closed.

However, Marathon also claims that it was prejudiced because it did not have time to consider the TEAM reports in preparing for Dr. Buc's deposition and it did not have time to reschedule the deposition because discovery closed the next day. Marathon's complaint is somewhat disingenuous. The parties continued to take depositions after discovery closed, and Marathon could have asked to depose Dr. Buc a second time. Even so, Marathon was prejudiced in the sense that it did not have the benefit of the TEAM reports when deposing Dr. Buc, and in that sense the defendants violated Rule 26(a)(2)(B)(ii), which requires disclosure of "the facts or data considered by the witness in forming [her opinions]."

Normally, "[i]f a party fails to provide information or 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 on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless." Fed. R. Civ. P. 37(c)(1). Based on that rule, the Court could preclude Dr. Buc from testifying on matters associated with the TEAM reports. But the Court also has discretion to order additional or

alternative sanctions. *Ibid*. Because the trial has been delayed while these motions are pending, and the parties had continued discovery on their own after the Court's deadline came and went, the better response is to allow Marathon the opportunity to depose Dr. Buc on the subject of her reliance on the TEAM reports and require the defendants to pay for any costs associated with re-deposing Dr. Buc.

E. Marathon's motion to exclude hearsay statements from former employees [dkt. #172]

Marathon anticipates that the defendants will attempt to offer evidence or testimony relating to statements that a former Marathon employee, Mark Homer, purportedly made to the defendants' Terminal Manager, Curt Robinson, regarding Mr. Homer's activities before being employed by Marathon and while working for a different, unrelated company. The exchange, colorfully described by Robinson at his deposition, went this way:

Q: And when do you recall learning that the PG 64-28 was modified with polyphosphoric acid, did you undertake an investigation to see which tanks at MMT were storing PG 64-28?

A: Well, the minute I found out that they were injecting polyphosphoric acid, I did not at that particular moment. I did not understand polyphosphoric acid, but I know what acid and steel does. And I looked at Mark Homer and Tracie McCall in our conference room in River Rouge, and pointed over my left shoulder, with Mark Homer sitting on my left, and I said, "You're going to tell me I've got two tanks full of this stuff that's mixed with acid?" I said, "What the fuck is that doing in my tanks right now?" Mark Homer spoke up and Tracie McCall, both said, "It's totally mixable in the asphalt. You have nothing to worry about. It never comes out of suspension."

Q: So that once it's blended, it becomes fully blended?

A: That's what I was lead to believe.

Q: In laymen's terms?

A: Right.

. .

Q: Did they tell you anything else during this meeting you can recall?

A: No. Mark Homer — prior to getting into the PPA aspect, Mark Homer bragged to myself and Alicia how his career at BP, how he destroyed many things.

Q: I don't – what did he destroy?

A: Pumps, and lines, and all kinds of equipment that he was experimenting with, that apparently all went wrong. But then again he told us, "Don't worry. If you do this, it will work just fine."

Q: So it was your understanding Mark Homer worked for BP before he worked for Marathon?

A: That would be my belief.

Q: And when you say he bragged that in his career at BP he destroyed many things

. . . what was he talking about?

A: Over the course of — equipment.

Q: Okay.

A: Pipelines, pumps.

Q: Okay. And he —

A: Different things; which I guess he was trying to joke about. But in retrospect, maybe he wasn't joking.

Q: And did he tell you, I mean, how the equipment, pipelines, pumps or different things were destroyed?

A: He didn't get into much detail; just that he kind of seemed proud about it.

Q: Do you know what his position was with BP?

A: No, I don't.

Pl.'s Mot. for Summ. J., Ex. D, Curt Robinson dep. at 24-26

The part of this testimony Marathon finds objectionable is Homer's statement that he "destroyed things." Marathon reasons that offering such testimony to prove that Homer in fact did destroy things violates the rule against hearsay. No exception can be found in Federal Rule of Evidence 801(d)(2), Marathon insists, because that part of the conversation did not relate to activity within Homer's employment at Marathon.

The defendants do not offer much resistance to that argument, but they do state that the statement may be admissible for another purpose, such as demonstrating the familiarity and relationship between Homer and Robinson. Indeed, other testimony at trial may render the statement relevant for a non-hearsay purpose, and in that sense, context matters. However, for now, the defendants may not offer the statement to prove that Homer destroyed things, and if the

defendants believe that the statement may be admissible for another purpose, they must seek permission out of the jury's hearing to offer the statement as evidence.

F. Marathon's motion to preclude evidence of a prior tank failure [dkt. #173]

Marathon anticipates that the defendants will attempt to offer evidence or testimony relating to the failure of an above-ground storage tank located at a facility that has no connection to this case, purportedly involving an unknown party's PPA-modified asphalt. That information comes from Dr. Buc's report, in which she wrote that in reaching her conclusions, she relied in part on a conversation she allegedly had with the operator of another asphalt-binder-storage facility:

A private discussion also occurred with the operator of another asphalt binder storage facility that had a steel aboveground storage tank fail as a result of PPA. The failure was attributed to pitting of the tank floor plate caused by poorly mixed PPA-modified asphalt. The root cause was the mixing process.

Pl.'s Mot. to Preclude Evidence of Prior Tank Failure, Ex. A, Expert Report of Dr. Buc at 22. Dr. Buc believed that the purported failure occurred at a facility called "Terry Materials." Pl.'s Mot. to Preclude Evidence of Prior Tank Failure, Ex. B, Buc dep. at 248. When questioned at her deposition, however, Dr. Buc could not recall the name of the person with whom she spoke or any details of the conversation beyond the general statements included in her report. *See id.* at 247-50. She did not take any notes during the conversation and did not obtain any details about the storage tank, the contents of the tank, or other circumstances surrounding the supposed failure. *See id.*

Marathon argues that the information is inadmissible because it is not relevant, and even if marginally relevant, it should be barred by Federal Rule of Evidence 403. The defendants respond that Dr. Buc relied on the information, which a reasonable investigator should do, and therefore the information can be received under Rule 703.

The failure of the other tank can be characterized properly as a prior accident. "Prior accidents must be 'substantially similar' to the one at issue before they will be admitted into evidence." *Croskey v. BMW of North America, Inc.*, 532 F.3d 511, 518 (6th Cir. 2008) (quoting *Koloda v. Gen. Motors Parts Div., Gen. Motors Corp.*, 716 F.2d 373, 376 (6th Cir. 1983)). "Incidents which 'occurred under similar circumstances or share the same cause' can properly be deemed substantially similar." *Surles ex rel. Johnson v. Greyhound Lines, Inc.*, 474 F.3d 288, 297 (6th Cir. 2007) (quoting *Rye v. Black & Decker Mfg. Co.*, 889 F.2d 100, 102 (6th Cir. 1989)). "The proffering party bears the burden of proof to establish substantial similarity." *Surles*, 474 F.3d at 297.

The only information the Court has regarding the tank failure at Terry Materials comes from Dr. Buc's expert report, quoted above. That not enough to establish the similarity of the tank failures. There is nothing in the present record to substantiate Dr. Buc's claims. The defendants did not depose the terminal manager of Terry Materials, submit any official API inspection reports, or consult anyone with personal knowledge of the other tank failure. Without more to show that the two events are substantially similar, evidence of the tank failure at Terry Materials is irrelevant.

Federal Rule of Evidence 703 allows an expert to disclose otherwise inadmissible facts "to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect." Fed. R. Evid. 703. What little facts Dr. Buc recalls of the Terry Materials tank failure will not help the jury understand her opinion on how poorly-mixed PPA-modified asphalt can cause a tank to fail. The Terry Materials tank failure just happens to serve as an example of a possible similar event. The defendants have not met their "substantial" burden of demonstrating that the value of that evidence is outweighed by the likely unfair prejudice that could result from the

jury considering the evidence for an improper purpose. *See Dresser v. Cradle of Hope Adoption Center, Inc.*, 421 F. Supp. 2d 1024, 1030 (E.D. Mich. 2006).

The Court will grant Marathon's motion to preclude introduction of evidence or testimony of the Terry Materials tank failure.

G. Marathon's motion to preclude evidence of subsequent asphalt blending methods [dkt. #174]

Marathon seeks to preclude the defendants from introducing, referencing, or relying on evidence or testimony concerning processes for modifying asphalt binder with polyphosphoric acid ("PPA") that were developed years after the blending at issue in this case. That evidence appears in the case in two forms: a discussion between MMT and Marathon about a joint proposal to blend PPA-modified asphalt; and a "best practices" report issues by Innophos, Inc., a producer of specialty grade phosphate products. The discussion of the processes described in those two encounters occurred after 2006, which was the year in which the asphalt deposited in Tank B was blended. Marathon argues that MMT's claim of negligence must focus on Marathon's conduct in 2006, and any processes developed after that time cannot be used to measure the reasonableness of Marathon's conduct. Marathon analogizes to products liability and malpractice cases, which define a standard of care in terms of the state of the knowledge in existence at the time of the alleged negligent act.

The potential evidence that provokes Marathon's concern comes from the following information in the record. Prior to 2007, Marathon contracted with Owens-Corning to blend its PPA-modified asphalt at its Trumbull facility. Owens-Corning had tanks at its own facility that were equipped with mixers for mixing asphalt. In order to blend PPA with the asphalt, Owens-Corning installed an injection mechanism by which PPA could be injected into the top of its mixing tank via a stainless steel pipeline. Innophos supplied the PPA, and injected it from a

tanker truck into the mixing tank, which contained Marathon's asphalt and three mixers that would blend the product. Once blended, the asphalt was transported from the Owens-Corning facility by barge to MMT's facility and other locations. Owens-Corning first produced the PPA-modified asphalt for Marathon on or about June 29, 2006. It ceased blending PPA and asphalt for Marathon in December 2007.

Because its contract with Owens-Corning was to end in December 2007, Marathon approached MMT in mid-2007 and inquired whether MMT would be interested in becoming a blending facility. By May 2008, Marathon, Innophos, and MMT had outlined a joint proposal for MMT to become an asphalt blending facility ("joint proposal"). The joint proposal stated the parties' intention to install at MMT's facility a PPA modification system. Tracie McCall, Marathon's Commercial and Specialties Products Marketing Manager, testified that the joint proposal was the end product of discussions among the three entities and outlined the process that would be used "if MMT were to proceed with providing those services for Marathon." Pl.'s Mot. to Preclude Evidence of Asphalt Modification Process, Ex. D, McCall dep. at 42.

According to the joint proposal, Marathon's asphalt would be circulated from a storage tank to a mixing tank and PPA would be injected into the asphalt just prior to its entering the mixing tank, thereby creating a performance grade product that would be pumped back into the storage tank. To that end, the parties contemplated that MMT would outfit its facility with the equipment necessary to achieve the outlined blending process, including a tank for storing PPA at MMT's facility and meters for measuring the amount of PPA injected into the asphalt.

Around the time of the parties' joint proposal, MMT's Terminal Manager, Curt Robinson, allegedly had a conversation with a Marathon employee, Mark Homer, in which Mr. Homer

described the Owens-Corning process and suggested that it was simple because Marathon was unwilling to invest as much money at Owens-Corning as it was willing to commit to the joint proposal:

Q: What did he [Mark Homer] tell you that they were doing at Trumbull?

A: He told me — and, you know, let me set the scene for you here. We're at lunch, and I'm sitting across from him at the table, not unlike I'm sitting across from you. And Mark Homer says, "I probably shouldn't tell you this, but you guys are going to be making this PPA for us anyways." I said, "Okay, Mark, what do you want to tell me?" He proceeded to lay out a story about how Mark Homer and Jack Stevens from Trumbull put together a system in Trumbull's Tank Number 27, where they put a two-inch line into the top of the tank to drop acid into the tank by truck, and that they would have a mixer on the tank, and that the — they would have a pump running on the tank, too, to agitate it. And that was supposed to mix the acid in. And that they did so, they brought the acid in from Innophos on a tank truck, and then they aired the acid off the truck. They pressurized the tank trailer with air, and literally pressurized the tank and pushed the acid into the tank through the connecting hose and the pipeline that they put in.

. .

Q: Did you question Mark about that?

A: Yeah, I questioned him on that.

Q: What did he say?

A: His response was when they first started doing that, that Marathon wouldn't pony up any money to put the system in, so that what was done is the system was put in the best that they could do as an experimental try. And they used Jack Stevens' expense account to fund the . . . project.

Pl.'s Mot. to Preclude Evidence of Asphalt Modification Process, Ex. E, Curt Robinson dep. at 32-34. That information led Mr. Robinson to infer that, in light of what the parties' joint proposal contemplated, the Owens-Corning process was inadequate. *Id.* at 32 ("I found it quite interesting that what he [Mark Homer] proposed for Michigan Marine Terminal to do, at an extreme expense to do it, was far different than what they were doing at Trumbull").

In April 2009, approximately 16 months after Owens-Corning stopped blending PPA with Marathon's asphalt and nearly a year after the parties' joint proposal, Innophos, in conjunction with another company in the business of making purified PPA, published a notice entitled "Best Practices

for PPA Modification of Asphalt," which outlined a general process for blending PPA with asphalt ("2009 Process"). Pl.'s Mot. to Preclude Evidence of Asphalt Modification Process, Ex. G, Best Practices Notice. According to Innophos's 2009 Process, "the typical operation" for modifying asphalt with PPA "includes delivering the PPA in bulk trucks or totes, storing the PPA in a dedicated tank, metering the PPA to control addition, and mixing a small amount of PPA uniformly with a large amount of asphalt." *Id.* at 5. Innophos also recommended that "a nitrogen blanket be placed over the [PPA]," when "storing PPA in a bulk tank." *Id.* Moreover, Innophos suggested two methods for actually blending PPA with asphalt: "(a) using a mixing tee or in-line static mixer in the process line carrying asphalt to a storage tank, or (b) adding the PPA into the top of a well agitated asphalt tank." *Id.* Innophos concluded that "[o]nce the PPA has been reacted with the asphalt . . . the bulk PPA modified binder and the head space above the PPA modified binder are NOT corrosive." *Ibid.*

 standards in existence at the time the product allegedly causing injury was sold. *See* Mich. Comp. Laws § 600.2946(4).

Marathon argues that evidence of Innophos's 2009 process for blending PPA with asphalt should be excluded because there is no evidence showing that Owens-Corning or anyone else knew of the 2009 process in 2006. Marathon also argues that evidence of the process for blending asphalt in the parties' 2008 joint proposal is not relevant because there is no evidence that in 2006 Owens-Corning or Marathon knew of the procedure that Marathon and MMT jointly developed in 2008.

The defendants argue that Marathon improperly employs a motion *in limine* to request that the Court decide fact issues and that Marathon's motion is filled with unsubstantiated factual claims that go to the ultimate question of whether Marathon's conduct conformed with the standard of care. They also argue that the products liability, failure to warn, and medical malpractice cases Marathon cites are not applicable to MMT's negligence claim. MMT contends that the evidence of the Innophos 2009 process and 2008 proposal is a relevant measure of the reasonableness of Marathon's conduct because no one has presented any evidence that Marathon was unaware of the practices the Innophos recommendation describes or those laid out in the joint proposal or that the practices adopted were new or recently discovered as of 2009.

The defendants cite *Churchwell v. Bluegrass Marine, Inc.*, 444 F.3d 898, 905 (6th Cir. 2006), a case arising from an accident in a ship's kitchen, in which the court considered a defendant's argument that evidence of safer procedures being used by other ship operators was not probative of negligence and should have been excluded. The Sixth Circuit disagreed, noting that even though such evidence doesn't alone prove negligence, "[p]roof that a safer alternative existed makes it

'more probable' that Defendants failed to exercise reasonable care in outfitting the kitchen." 444 F.3d at 905. Evidence of that sort, therefore, can be relevant.

The cases Marathon cites in support of its relevancy argument are not helpful. They mainly involve "subsequent design" evidence that is entirely dissimilar from the evidence Marathon seeks to exclude here. See Tate v. Robbins & Myers, Inc., 790 F.2d 10 (1st Cir. 1986) (On duty to warn claim, plaintiff wanted to use a 1980 manual in relation to hoist built 37 years prior in 1943; because the plaintiff could not prove that manufacturer had been informed that plaintiff/purchaser owned the hoist, the 1980 manual was held to be irrelevant); Brock v. Caterpillar, Inc., 94 F.3d 220 (6th Cir. 1996) ("Comparison" evidence being excluded was that of a braking system used on an entirely different model of bulldozer than the model that was in the accident, which also was built many years after the model at issue); Christ v. Sears, Roebuck & Co., 149 F.3d 1182 (6th Cir. 1998) (Plaintiffs wanted to offer the 1993 version of a saw versus the 1979 saw that had caused the injury; because the plaintiffs did not offer any evidence that the decades-later technology in the 1993 saw existed in 1979, the court would not impose a "duty to invent" on the manufacturer); Grenada Steel Indus, Inc. v. Alabama Oxygen Co., 695 F.2d 883 (5th Cir. 1983) (Evidence related to valve built by a competitor-manufacturer years after the valve in question was manufactured is not relevant to whether the product was reasonably safe at the time it was made); Ward v. Hobart Manuf. Co., 450 F.2d 1176 (5th Cir. 1976) (Where expert had not done any research on the design of meat grinders in 1948 and only looked at Defendant's brochures, had made a "cursory" examination of state safety regulations, and had talked to a few local butchers, he had not laid foundation which would justify reliance on expert's testimony as to the proper design of the meat grinder in 1948 or even in 1970, the date of the accident); Nachtsheim v. Beech Aircraft Corp., 847 F.2d 1261 (7th Cir. 1988)

(Plaintiffs wanted to submit evidence of another airplane accident, but because plaintiff did not provide any evidence that the alleged dangerous condition — a frozen elevator — was in any way involved with the prior accident, it was held to not be substantially similar enough to warrant inclusion).

Further, Marathon's argument that the processes did not exist at the time of the alleged improper blending is meritless. The mixing processes existed. As the defendants correctly pointed out, the mixing technology recommended in the Innophos 2009 Process and the 2008 Joint Proposal has existed for years and years. Any engineer with a college degree would have known of the mixing technology mentioned. But that is not really the issue. The real issue is whether Marathon was negligent in not adopting more advanced mixing technology when it mixed the asphalt that allegedly caused Tank B's failure. The standard of care turns on industry knowledge concerning PPA at the time in question, not what industry adopts as best practices after the fact. Marathon's better argument is that in 2006, it could not have known what would be considered a "best practice" because that standard was not adopted until 2009. In that sense, Marathon is correct in arguing that it is irrelevant that Innophos adopted a mixing best practice in 2009.

The parties 2008 Joint Proposal present a more difficult question. Tracie McCall testified that Owens-Corning manufactured PPA-modified asphalt for Marathon until December 2007. She also testified that Marathon began discussions with MMT about modifying asphalt in mid-2007, before Owens-Corning stopped mixing asphalt for Marathon, and that a document (presumably the 2008 Joint Proposal) was a culmination of many discussions and evaluations of MMT's tanks and their potential capabilities. There are portions of the 2008 Joint Proposal that differ from Owens-Corning's process based solely on the facilities' different infrastructure. But it is likely that there

are portions of the mixing process that were changed because Marathon was just using the Owens-Corning mixing process as an "experimental try." Ex. E, Curt Robinson dep. at 34. Insofar as the 2008 Joint Proposal represents the culmination of a development process that began *before* Owens-Corning stopped mixing asphalt, the information is relevant.

However, the 2008 Joint Proposal, if offered by itself, could be misleading and therefore unfairly prejudicial. The better practice, which the Court will adopt, is to preclude the defendants from offering the joint proposal out of context as evidence that Marathon was negligent, unless the defendants can establish that Marathon knew of the methods described therein at the time it blended the PPA-modified asphalt that was deposited into Tank B. In all events, however, the defendants will be allowed to question Marathon's employees about why it proposed the changes in the proposal. Any non-facility-specific change that was born out of Marathon's knowledge of the difficulty of mixing PPA with asphalt may be brought to light.

Marathon's motion to exclude any testimony or evidence of Mark Homer's statements will be denied. His conversation is directly relevant to whether Marathon knew its mixing procedure at Owens-Corning was adequate. The simple fact that his statements were made during a discussion of the proposed mixing procedures at MMT does not mean they should be excluded.

H. Marathon's motion to exclude February 2011 video recording of Tanks B & 109 [dkt. #176]

On February 26, 2011, the defendants created a 50-minute video that depicts the condition of Tank B and the condition of Tank 109. The defendants' expert, Dr. Elizabeth Buc, directed the video and provided commentary during the recording. She describes the video as a means to introduce the jury to several of MMT's tanks and the interior condition of Tank B and 109. After a brief glimpse of the exteriors of Tanks 109, A, B, and C, Dr. Buc enters Tank B and films every

pit and hole found in the bottom of Tank B. Each pit and hole has been circled with either white paint or chalk. The markings are from the TEAM Industrial inspections. After a thorough viewing of Tank B, the video takes the viewer into Tank 109. The defendants provided Marathon with a copy of the video on May 19, 2011 during Alicia Cytacki's deposition.

Marathon does not want the jury to see the video. It argues that Dr. Buc did not rely on or mention the video in her expert reports, the defendants did not mention the video in any response to discovery request, and it was not turned over within thirty days of Marathon's request for all documents and potential exhibits intended to be used at trial. Marathon also takes the position that the video must be declared irrelevant unless the defendants can show that the condition of the tanks as depicted in the video is the same as the condition of the tanks on the day of the failure — more than 21 months prior to the recording. Otherwise, Marathon reasons, the video will mislead the jury into believing that the condition of Tank B after being exposed to fire, the elements, and firefighting efforts is the same as it was when the Tank failed. Additionally, Marathon believes that the video will be duplicative because pictures and samples from Tank B will offered at trial. Finally, Marathon says that Dr. Buc's narrative is an out-of-court statement that amounts to hearsay.

The Court need not spend much time on this motion. The video was turned over before the close of discovery and did not constitute information relied on by Dr, Buc in formulating her opinions. As to foundation, Marathon asks the impossible: it would be impossible to offer physical evidence that matched Tank B's condition on the day of the rupture because that evidence no longer exists. All that remains to the parties to investigate is Tank B as it currently stands. Such is usually the case with catastrophic product failures. That does not bar the defendants from offering evidence of Tank B's current condition as a clue to what caused the rupture. Scientists and engineers do that

all of the time; something fails and they look at the pieces to try to deduce what caused the failure based on their knowledge of material properties. This common sense notion is supported by the fact that Marathon's experts relied on similar testing of Tank B carried out after the rupture and the fire.

Moreover, there is no chance that the jury will be confused by the video. The Court is confident that Marathon, through cross-examination, will ensure that the jury knows the video was taken after the rupture, the fire, and exposure to the elements. There is no reason to exclude the video, except perhaps for its length and mostly uninteresting content.

The defendants counter Marathon's hearsay objection with the suggestion that Dr. Buc's narrative can fit within the business records exception found in Federal Rule of Evidence 803(6). That suggestion cannot be seriously entertained; it is not even a close call. Nonetheless, Marathon's hearsay objection can be accommodated by muting the video and having Dr. Buc testify to what the video shows. Otherwise, Marathon's motion will be denied.

I. Defendants' motion to exclude expert Steven Caruthers [dkt. #204]

The defendant filed a late motion *in limine* to exclude expert testimony by Steven Caruthers because Caruthers never furnished a report required by Federal Rule of Civil Procedure 26(a)(2). Caruthers is the president of TCI Services, Inc. d/b/a Tank Consultants, Inc. (TCI), a company Marathon hired to perform American Petroleum Institute (API) inspections of MMT's tanks. However, it does not appear that he inspected any of the tanks. Instead, TCI inspectors J. Stecher, S. Saxbury, and M. Green inspected three of the tanks, and inspectors C. Williams, B. Redmon, E. Hoeft, and J. Merrill inspected the fourth. Alan Frye of TCI then took the field reports for Tanks A, B, and 109 and prepared an "Evaluation Report" for each. Finally, Caruthers checked the reports for Tanks A, B, and 109.

The defendants contend that they did not know that Marathon intended to call Caruthers at trial to testify as an expert until the lawyers met to prepare the joint final pretrial order, which was after the motion in lilmine filing deadline. They filed their motion, they assert, as soon as they learned of Marathon's intentions. Marathon says, however, that the defendants should have realized that Caruthers would emerge as an expert witness at trial. It identified him in a witness list filing in August 2010 pursuant to a now-defunct scheduling order issued by a magistrate judge before this case was reassigned to me. However, Marathon never mention Caruthers in its later pretrial disclosures on November 21, 2011 that were required by my scheduling order. Marathon also contends that the parties agreed to exchange expert reports in the form of the API inspection reports, and although Marathon's API report was not authored by Caruthers, it contains the equivalent information that he would provide at trial. Marathon reasons that because it revealed Caruthers's name in an earlier filing, and its API 653 reports contain information that approximates Caruthers's opinions, the defendants cannot complain that they are surprised, and the decision not to take Caruthers's deposition was their own. Besides, Marathon insists, the local rules and the joint final pretrial order trump the disclosure rules, including Rule 26(a)(3)(A).

The defendants, however, cry foul, and with good reason. Marathon does not deny that it did not identify Caruthers as a witness who would testify about the cause of Tank B's rupture until the lawyers met on January 5, 2012 to assemble the proposed final pretrial order. And in its response to the present motion, Marathon added that Caruthers would testify to MMT's lack of maintenance of its storage tanks and noncompliance with industry standards as well. However, no report shown to the Court attributes an opinion on the cause of the tank failure to Caruthers. The TCI inspection reports are silent on MMT's maintenance of the tanks and do not mention the

standard of care for tank maintenance, MMT's history of maintaining its tanks, or what MMT should have done differently in its maintenance practices. And the TCI inspection reports do not detail any "industry standards" or discuss how any such standards would bear on the issues presented in this lawsuit.

Marathon's reliance on an agreement to substitute the API reports for disclosures under Rule 26(a)(2) is questionable. The defendants contend that the parties' agreement on expert reports relating to tank inspections was about the timing of the reports, not their content. The letter upon which Marathon relies tends to support the defendants' position. It says:

This correspondence will confirm our telephone conversation today wherein we agreed that expert reports regarding API 653 standards of tank design, construction, and maintenance, and in particular the design, construction and maintenance of various tanks at MMT's facilities will not be exchanged on December 31, 2010, but after completion of the API 653 inspections at MMT.

Pl.'s Mot. to Exclude Testimony of Steve Caruthers, Ex. F, Letter dated December 9, 2010.

Expert reports are governed by Federal Rule of Civil Procedure 26(a)(2). The reports must be exchanged on time, and they must contain the items listed in rule 26(a)(2)(B). The failure to serve a report timely or furnish a complete report may constitute grounds to strike the report under Rule 37(c). *See Phillips v. Cohen*, 400 F.3d 388, 402 (6th Cir. 2005). Moreover, Rule 37(c)(1) authorizes the district court to exclude from a trial information that was withheld in violation of Rule 26(a) or (e) without "substantial justification," unless the failure to disclose was "harmless." In fact, the language of Rule 37 suggests that exclusion is mandatory in these circumstances. *See Dickenson v. Cardiac & Thoracic Surgery of E. Tenn.*, 388 F.3d 976, 983 (6th Cir. 2004) (citing *Musser v. Gentiva Health Servs.*, 356 F.3d 751, 758 (7th Cir. 2004)); *see also Samos Imex Corp. v. Nextel Commc 'ns., Inc.*, 194 F.3d 301, 305 (1st Cir. 1999) (explaining that "as amended, the civil procedure

rules make clear that exclusion of evidence [such as an expert's testimony] is a standard sanction for a violation of the duty of disclosure under Rule 26(a)").

It could be said that both sides dropped the ball with respect to Caruthers. The defendants did not file a timely motion *in limine* challenging Caruthers's testimony despite the fact that he was identified as a potential expert witness in August 2010. But Marathon's failure to include him in its subsequent pretrial disclosure and the absence of an expert report is sufficient reason for the defendants to have been misled about Marathon's intentions until they learned the truth after the motion filing deadline. Marathon failed to produce an expert report for Caruthers that identified the opinions he will express and the basis and reasons for them. The Court cannot find that Marathon's failure was harmless or substantially justified. Rather, that breach of the rules causes the defendants substantial prejudice. The motion to exclude Steven Caruthers as an expert witness will be granted.

III.

Based on the foregoing discussion, it is **ORDERED** that Marathon's motion to exclude expert testimony by Dr. Elizabeth Buc [dkt. #147] is **GRANTED IN PART AND DENIED IN PART**. Dr. Buc may not provide an opinion on the cause of the fire on the defendant's premises.

The motion is denied in all other respects.

It is further **ORDERED** that Marathon's motion to exclude expert testimony by Joel Huffman [dkt. #131] is **DENIED**.

It is further **ORDERED** that Marathon's motion to exclude damages expert James Paskell [dkt. #132] is **DENIED**.

It is further **ORDERED** that Marathon's motion *in limine* to preclude the admission of any evidence or testimony related to TEAM industrial reports [dkt. #135] is **DENIED**. However,

Marathon may re-depose Dr. Buc on the subject of her reliance on those reports, at the defendants' expense.

It is further **ORDERED** that Marathon's motion to preclude evidence or testimony related to hearsay statements of former employees [dkt. #172] is **GRANTED IN PART**. The defendants may not offer Mark Homer's statement to prove that Homer destroyed things. If the defendants believe that the statement may be admissible for another purpose, they must seek permission out of the jury's hearing to offer the statement as evidence.

It is further **ORDERED** that Marathon's motion *in limine* to preclude introduction of evidence or testimony of an alleged prior tank failure [dkt. #173] is **GRANTED**.

It is further **ORDERED** that Marathon's motion *in limine* to preclude evidence or testimony related to processes for modifying asphalt developed after the blending at issue [dkt. #174] is **GRANTED IN PART AND DENIED IN PART**. The defendants are precluded from offering the 2009 Innophos Process into evidence or referring to it without limitation. They may, however, offer the 2008 Point Proposal, but only to ask Marathon's employees why they suggested any changes. The defendants may offer evidence of Mark Homer's statements about the mixing process at Owens Corning.

It is further **ORDERED** that Marathon's motion *in limine* to exclude defendants' February 2011 video recording of Tanks B and 109 [dkt. #176] is **GRANTED IN PART AND DENIED IN PART**. The defendants may not play the audio recording of the tape. The motion is denied in all other respects.

It is further **ORDERED** that the defendants' motion to exclude testimony by Marathon's proposed expert Steven Caruthers [dkt. #204] is **GRANTED**.

It is further **ORDERED** that the case management and scheduling order is modified as follows:

The proposed joint final pretrial order is due on or before January 3, 2013.

The Final Pretrial Conference shall take place on January 10, 2013, at 3:30 p.m.

Trial shall commence on January 22, 2013, at 8:30 a.m.

The balance of the Case Management and Scheduling Order remains in effect.

s/David M. Lawson
DAVID M. LAWSON
United States District Judge

Dated: October 19, 2012

PROOF OF SERVICE

The undersigned certifies that a copy of the foregoing order was served upon each attorney or party of record herein by electronic means or first class U.S. mail on October 19, 2012.

s/Deborah R. Tofil DEBORAH R. TOFIL