UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

Green Plains Otter Tail, LLC,

Civil No. 16-370 (DWF/LIB)

Plaintiff,

v.

MEMORANDUM OPINION AND ORDER

Pro-Environmental, Inc.,

Defendant.

A. Elizabeth Burnett, Esq., and Scott G. Johnson, Esq., Robins Kaplan, LLP; Brian G. Cunningham, Esq., Nielsen, Zehe & Antas, PC; and Michael Sean Errera, Esq., and

Michael L. Foran, Esq., Foran Glennon Palandech Ponzi & Rudloff PC, counsel for

Plaintiff.

Amanda M. Cialkowski, Esq., and Brian N. Johnson, Esq., Nilan Johnson Lewis PA; Brendan R. Tupa, Esq., John C. Syverson, Esq., & Teri E. Bentson, Esq., Law Offices of Thomas P. Stilp; and Travis J. Adams, Esq., Peterson, Logren, & Kilbury, P.A., counsel for Defendant.

INTRODUCTION

This matter is before the Court on Defendant's Motion for Summary Judgment. (Doc. No. 74.) For the reasons set forth below, the Court grants Defendant's motion in its entirety.

BACKGROUND

Plaintiff Green Plains Otter Tail ("Green Plains") owns and operates an ethanol production facility ("Plant") located in Fergus Falls, Minnesota. (Doc. No. 1 ("Compl.")

¶ 5.) The Plant uses a large rotary drum dryer and regenerative thermal oxidizer ("RTO")

to process ethanol co-product. (*See* Doc. No. 77 ("Cialkowski Decl.") ¶ 10, Ex. 8 ("Barbera Report") at 3; Compl. ¶ 6.) Defendant Pro-Environmental, Inc. ("PEI") designed, manufactured, distributed, and/or sold the RTO and its related equipment installed at the Plant. (Compl. ¶ 7.)

The RTO collects vapors from the dryer's exhaust duct and burns off pollutants before releasing the vapors to the atmosphere. (*See* Barbera Report at 3.) It consists of three chambers and a group of dampers that control the vapor's flow. (*Id.*) The dampers are powered by a hydraulic power unit ("HPU"). (*Id.*; Compl. ¶ 6.) In the event of an emergency, a dump stack damper is supposed to open automatically for vapor and gases to escape the RTO. (Comp. ¶ 6.) At the same time, an isolation damper should close, as to prevent the heated vapors from entering the dryer. (*Id.*)

The Plant's HPU is operated by a pump that supplies hydraulic pressure to the RTO. (Barbera Report at 3.) In lieu of a back-up pump, the HPU contains an accumulator designed to expand and supply sufficient hydraulic fluid to move the dampers to their fail-safe positions should the main power unit fail. (Barbera Report at 3.) The accumulator consists of a rubber bladder pre-charged with nitrogen gas. (*Id.*) When the system pressure fails, the bladder pressure forces fluid from the accumulator back into the system. (*Id.* at 3-4.) The accumulator does not work unless it is charged. (*See* Cialkowski Decl. ¶ 13, Ex. 11 ("Operation Manual") at MINDEN017996.)

On March 10, 2014, the RTO experienced a high temperature failure and alarm. (Compl. ¶ 9.) The Plant's staff discovered that a coupling in the HPU's driveshaft had failed, resulting in a loss of pressure. (*Id.*) The dump stack damper and isolation damper

then locked into the open and closed positions, respectively – the opposite of their fail-safe positions. (*Id.*) Shortly after the failure, a fire and explosion occurred in the dryer. (*Id.* \P 10.)

During a subsequent inspection, investigators determined that the accumulator had no remaining pre-charge pressure, indicating that it had failed as well. (Barbera Report at 4.) Without a charge, it was unable to provide a backup source of power to move the dampers to the desired positions dampers when the main power source failed. (*See id* at 3-4.)

In this action, Green Plains brings two claims: (1) negligence (design defect and failure to warn), and (2) strict liability (design defect and failure to warn). (Compl. ¶ 11-17.) PEI argues that the fire and explosion would not have taken place but for Green Plains' failure to maintain a well-designed product and moves for summary judgment. (Doc. No. 74.)

DISCUSSION

I. Legal Standard

Summary judgment is appropriate if the "movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Courts must view the evidence and all reasonable inferences in the light most favorable to the nonmoving party. *Weitz Co., LLC v. Lloyd's of London*, 574 F.3d 885, 892 (8th Cir. 2009). However, "[s]ummary judgment procedure is properly regarded not as a disfavored procedural shortcut, but rather as an integral part of the Federal Rules as a whole, which are designed 'to secure the just, speedy, and inexpensive

determination of every action." *Celotex Corp. v. Catrett*, 477 U.S. 317, 327 (1986) (quoting Fed. R. Civ. P. 1).

The moving party bears the burden of showing that there is no genuine issue of material fact and that it is entitled to judgment as a matter of law. *Enter. Bank v. Magna Bank of Mo.*, 92 F.3d 743, 747 (8th Cir. 1996). The nonmoving party must demonstrate the existence of specific facts in the record that create a genuine issue for trial. *Krenik v. Cty. of Le Sueur*, 47 F.3d 953, 957 (8th Cir. 1995). A party opposing a properly supported motion for summary judgment "may not rest upon mere allegation or denials of his pleading, but must set forth specific facts showing that there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 256 (1986).

II. Legal Theories

Green Plains argues that the fire and explosion at the Plant were the direct and proximate cause of PEI's negligence and defective RTO that PEI designed, manufactured, and/or sold. (Compl. at 1.) Under Minnesota law, claims of negligence and design defect merge into a single theory of strict products liability. *See Lee v. Crookston Coca-Cola Bottling Co.*, 188 N.W.2d 416, 432 (Minn. 1971) ("While in conventional tort terms no proof of negligence is necessary [in a strict products liability action], in many cases proof of a defect may simply be a substitute word for negligence."); *see also Piotrowski v. Southworth Prods. Corp.*, 15 F.3d 748, 751 (8th Cir. 1994) ("Where design defect cases are involved, Minnesota merges the theories of strict liability and negligence.") (citing *Bilotta v. Kelley Co.*, 346 N.W.2d 616, 623 n.3 (Minn. 1984)). Similarly, failure to warn claims based on negligence and on strict liability

merge into a single cause of action. *Bilotta*, 346 N.W.2d at 623; *see also Piotrowski*, 15 F.3d at 751; *Huber v. Niagara Mach. & Tool Works*, 430 N.W.2d 465, 468 n.1 (Minn. 1988) (liability for failure to warn in Minnesota is based on principles of negligence). The Court will address the merged claims followed by the failure to warn claim.

A. Design Defect (Negligence and Strict Liability)

To recover for strict liability under Minnesota products liability law, Green Plains must establish that: (1) the RTO was in a defective condition unreasonably dangerous for its intended use; (2) the defect existed when the RTO left PEI's control; and 3) the defect was the proximate cause of the fire and explosion. *Bilotta*, 346 N.W.2d at 623 n.3 (citing *Lee*, 188 N.W.2d at 432). To determine whether a product is unreasonably dangerous, the Court applies a reasonable-care test balancing the likelihood and gravity of possible harm against the burden of the precaution necessary to avoid it. *Bilotta*, 346 N.W.2d at 621. "The test is an objective standard 'which focuses on the conduct of the manufacturer in evaluating whether its choice of design struck an acceptable balance among several competing factors." *Trost v. Trek Bicycle Corp.*, 12 F.3d 1004, 1009 (8th Cir. 1998) (citing *Bilotta*, 346 N.W.2d at 622); *see also Young v. Pollock Eng'g Grp.*, *Inc.*, 428 F.3d 786, 789 (8th Cir. 2005).

Green Plains argues that "rather than balancing and evaluating the RTO setup, design parameters, and safety features specific to [its] location, PEI simply re-used the same model installed at 75 other facilities and assumed it was 'robust' enough to work." (Doc. No. 80 ("Opp.") at 31.) Green Plains alleges in its Complaint that the RTO was defectively designed because: (1) it lacked an adequate alarm to alert Plant operators to a

failure of its hydraulic system; and (2) it did not contain a backup pump or motor in the event of a hydraulic pump or motor failure. (Compl. ¶ 16.) It further alleges a number of other design defect theories in its memorandum in opposition to PEI's motion for summary judgment including:

PEI designed the dump stack and isolation dampers to move to their failsafe positions by hydraulic pressure, instead of compressed air.

. . .

PEI's design only measured the hydraulic pressure of the system as a whole, and did not monitor the individual pressure in the HPU or the accumulator.

. . .

PEI's design of the PLC [programmable logic controller] software allowed the RTO system to continue operations for an additional 50 seconds when there was insufficient hydraulic pressure in the system to move the dump stack and isolation dampers to failsafe positions in the event of an RTO shutdown.

. . .

PEI designed the RTO to use hydraulic pressure from both the HPU and the accumulator to change the positions of the dump stack and isolation dampers within 6 seconds. Without a functioning accumulator, the HPU could change the positions of the dampers within 9 seconds. PEI designed the PLC program to alarm if the dampers did not change position within 15 seconds. Had PEI simply set the PLC to warn if the damper change took between 6 and 9 seconds, Green Plains would have been notified the accumulator was not functioning.

. . .

When the facility was being built, PEI specified an accumulator with only a 10 gallon reserve, even though there were larger reserve tanks available to ensure adequate backup hydraulic fluid to move the dampers to a failsafe position.

(Emphasis in original.) (Opp. at $6 \ 10, 8 \ 21, 9 \ 24, 10 \ 29, 11 \ 37.$)

Nonetheless, the mere fact of alternative designs does not prove that PEI's design was defective. *See Larson v. General Motors Corp.*, 391 F.2d 495, 497 (8th Cir. 1968) ("[A] manufacturer is under no duty to design an accident-proof or fool-proof product."). Here, the RTO manufactured by PEI was consistent with industry standards. (Cialkowski Decl. ¶ 4, Ex. 2 ("Pennington Report") at 17.) The use of a single pump is the standard approach, and the hydraulic system has been industry custom for over 40 years. (*Id.*) Further, Green Plains acknowledges that the same model is installed at 75 other locations but does not explain how its own Plant differs such that the design flaw effects only its Plant.¹ (Opp. at 31.) Further, there is no evidence that this model is prone to catastrophic failure.²

While Green Plains suggests that a proper design should monitor the individual pressure in the accumulator, its model does measure the accumulator's pressure.

(Operation Manual at MINDEN017993.) Arguably, a better design would isolate just the charge in the accumulator's bladder while the HPU is powered up, but Green Plains' expert testified that no such technology exists. (Cialkowski Decl. ¶ 3,

Ex. 1 ("Minden Dep.") at 105-106.) There is a way to monitor the bladder's charge, but

Green Plains argues that because no two of the 75 facilities are alike in terms of capacity and configuration, PEI should have designed individual RTO and dryers to match the hydraulic system at each plant. (Transcript of Mot. Hr'g at 38.) Nonetheless, this does not explain why the system functions well at every other location.

The Operation Manual indicates that bladders lose their charge over time. (Cialkowski Decl, 13, Ex. 11 at MINDEN017996.) There is nothing in the record to contradict this, or to suggest that bladders are prone to sudden failure.

it requires the system to be powered off and use of a charging and gauging assembly. (Operation Manual at MINDEN017996.) Green Plains did not own the charging and gauging assembly necessary to check the charge. (Cialkowski Decl. ¶ 9, Ex. 7 at 65.)

Further, there is no indication that an accumulator with a larger reserve would have made a difference; because the accumulator's bladder had no charge, it would not have operated regardless of the size of reserve. (*See* Barbera Report at 4 ("[T]he accumulator was measured to have no remaining pre-charge pressure indicating that the accumulator had failed.").) Green Plains' expert stated that if the accumulator had been charged, it had the capacity to move the dampers to their failsafe positions. (Minden Dep. at 100.) There is no evidence, however, that Green Plains ever checked or charged the bladder in the accumulator. (Cialkowski Decl. ¶ 7, Ex. 5 ("Systma Dep.") at 154.) A larger reserve would not have prevented the fire and explosion because it still needed a charge to function.

Additionally, Green Plains references software which allows the RTO to operate for 50 seconds before shutting down. While Green Plains' expert described this software (Doc. No. 81 ("Foran Decl.") ¶ 14, Ex. L ("Minden Report") at 13-14), there is nothing in the record which indicates that the 50-second delay is linked to the actual fire and explosion. Green Plains' expert testified that the RTO likely shut off "within a few seconds." (Minden Dep. at 60.) "A plaintiff cannot prevail in a design-defect case simply by arguing, in the abstract, that a product is defectively designed. Instead, the plaintiff must explain why, under the reasonable-care balancing test, the world would be

a better place if the product were either designed differently or taken off the market." *Kapps v. Biosense Webster, Inc.*, 813 F. Supp. 2d. 1128, 1161 (D. Minn. 2011).

Green Plains also suggests that the 15-second alarm system was flawed because it was not based on the HPU's actual pump capacity. (Minden Report at 23.) "Since the pump could operate the dampers in 9 seconds, the 15-second time limit was never met, and the system was unable to issue a warning to the operators as to the hazard of the non-functional accumulator." (*Id.*) Green Plains argues that the alarm should have been set between 6 and 9 seconds. (*Id.*) "Had PEI undertaken this reasonable step, the PLC logic would have been able to determine that the accumulator would have lost its pre-charge pressure and was no longer providing flow assistance." (*Id.*)

If a loss of charge was the only trigger for the alarms, this would be a compelling argument. The same expert proposing this alteration, though, testified that worn seals, hose leakage, or leakage past a particular cylinder may also decrease the speed of the dampers and trigger the alarm. (Minden Dep. at 106-107.) He affirmed that there were a number of things to check when the alarms sounded, "in addition to the accumulator." (*Id.* at 107.) Despite frequent alarms, there is no indication that any Green Plains employee ever checked the charge on the accumulator's bladder. (Systma Dep. at 32, 129.) It is unclear how the additional time would have changed this outcome.

While there is also dispute over whether the accumulator was ever charged at all, Green Plains' expert testified that the RTO would not have functioned correctly to meet EPA regulations if the accumulator was not initially charged. (Minden Dep. at 133.)

PEI's corporate designee who was responsible for the Plant's commissioning process also

testified that he verified the accumulator was properly charged. (Cialkowski Decl. ¶ 14, Ex. 12 at 78.) Although the Court finds that there is sufficient testimony to conclude that the accumulator was charged at the time of commissioning, it is worth noting that if Green Plains had performed monthly checks, it would have known whether or not it was charged. Nonetheless, Green Plains urges that there is a genuine issue of material fact as to precisely when the accumulator lost its charge. Because this model is not unique, and there is no evidence that it is prone to catastrophic failure, it is mere speculation that the accumulator failed suddenly. To defeat summary judgment, the non-moving party "must substantiate [its] allegations with sufficient probative evidence that would permit a finding in [its] favor based on more than mere speculation, conjecture, or fantasy." Wilson v. Int'l Bus. Mach. Corp., 62 F.3d 237, 241 (8th Cir. 1995).

Finally, Green Plains argues that PEI should have conducted a hazard and operability study ("HAZOP") to identify the danger posed by a dual failure of the HPU and accumulator. (Opp. at 31.) Even if a HAZOP had identified an extra mechanism, the equipment still would have required maintenance to function.

The Court finds that PEI's design struck an acceptable balance among competing factors and that it was not unreasonably dangerous. *See Trek Bicycle Corp.*, 12 F.3d at 1009. While it could have used a second accumulator, or compressed air, or an alarm that sounded between 6 and 9 seconds instead of 15, it did not have to; PEI struck an acceptable balance among competing factors. The RTO conformed to industry standard, it included an accumulator sufficient to serve as a back-up source of power, it incorporated available technology to monitor pressure, and included a functioning alarm

system. Even allowing for some sort of defect, the Court is unconvinced that any alleged defect was the proximate cause of the fire and explosion.

While proximate cause is generally a question of fact for the jury, "where reasonable minds can arrive at only one conclusion, proximate cause is a question of law." Lubbers v. Anderson, 539 N.W.2d 398, 401 (Minn. 1995). Here, Green Plains' own lack of maintenance was a superseding cause that broke any causal connection between an alleged design defect and the fire and explosion. "The doctrine of superseding cause recognizes that although an actor's negligent actions may have put the plaintiff in a position to be injured, and therefore contributed to the injury, the actual injury may have been caused by an intervening event." Wartnick v. Moss & Barnett, 490 N.W.2d 108, 113 (Minn. 1992). An intervening act is a superseding cause when four elements are satisfied: (1) its harmful effects must have occurred after the original negligence; (2) it must not have been brought about by the original negligence; (3) it must have actively worked to bring about a result which would not otherwise have followed from the original negligence; and (4) it must not have been reasonably foreseeable by the original wrongdoer. Canada ex rel. Landy v. McCarthy, 567 N.W.2d 496, 507 (Minn. 1997).

Green Plains argues that the first element fails because PEI's alleged negligent design of the RTO was continuous and ongoing. (Opp. at 30.) It maintains that PEI cannot establish that any maintenance activities created a condition that superseded PEI's initial negligence. (*Id.*) Ostensibly, Green Plains argues that whether or not it conducted maintenance, the design of the RTO was so poor that it was the sole proximate cause of

the fire and explosion. Green Plains relies on *Johnson v. Serra*, 521 F.2d 1289 (8th Cir. 1975). There, a plaintiff was killed while assembling a sculpture. *Id.* at 1291. Even though he failed to follow assembly instructions, the court found that his actions were not a superseding cause to his injury because defects in the sculpture itself were continuous and ongoing. *Id.* at 1292. Specifically, the structural integrity of the of the sculpture was compromised prior to the plaintiff's accident. *See id.* at 1291. It was so flawed that the accident likely would have occurred in absence of the plaintiff's negligence. *See id.* The court also opined that it was foreseeable that the plaintiff would not follow the assembly directions. *Id.* at 1292.

Here, there is nothing to indicate that the RTO would have failed but for Green Plains' lack of maintenance. Unlike *Serra*, the RTO was not compromised from the start; it conformed to industry standards. Further, it is unforeseeable that Green Plains would fail to maintain its equipment. While Green Plains submits that it conducted routine maintenance on the HPU as a whole, there is no evidence that it checked or maintained the accumulator and/or its bladder. To the contrary, Green Plains' chief boiler engineer testified that while he was aware the accumulator needed to be maintained, he did not check or maintain it, nor was he aware of anyone who had. (Systma Dep. at 129, 151, 153.)

Green Plains asserts, "even if all recommended maintenance was performed, the HPU and accumulator could still fail at any time." (Opp. at 30.) It also argues that even well-maintained equipment can fail at any time without warning. (Opp. at 23.) The Court is not convinced. Just as one does not buy a new car and question why it fails after six

years without an oil change, it is unreasonable to fault a manufacturer for equipment that breaks down after failing to maintain it. Even if PEI had used one of the alternative designs suggested by Green Plains, maintenance was still required. Any alleged negligence by PEI was not continuous and ongoing such that the first element fails.

Similarly, the second and third elements are satisfied. But for Green Plains' lack of maintenance, the accident would not have occurred. Two experts agree that the RTO failed because it was not properly maintained:

The HPU failed due to a lack of proper maintenance. A drive coupling between the motor and the pump failed and the system could no longer generate hydraulic pressure. Additionally, an accumulator within the HPU which was intended, in part, to provide pressurized fluid to the system in the event of a motor or pump failure, was not functioning. Preventative maintenance would have revealed these defects before a catastrophic system malfunction was imminent, and would have prevented the subject explosion.

(Barbera Report at 2.)

The March 10, 2014 incident at Green Plains resulted from Green Plains' failure to maintain equipment, including checking the pressure of the accumulator and failing to conduct sufficient and consistent burns out of the RTO.

(Pennington Report at 29.)

A third expert concludes that, "the cause of the incident which took place on March 10, 2014, is attributable to the isolation and vent stack dampers not moving to their failsafe positions when the RTO lost hydraulic pressure due to pump coupling failure." (Minden Report at 24.) He further attributes the incident to a faulty accumulator and poor alarm system but does not speculate on what role maintenance played in the failure. (*Id.*)

The Court finds that Green Plains' lack of maintenance was the sole cause of the fire and explosion, and that its negligence did not follow any condition created by PEI. Three experts agree that the fire and explosion occurred because both the HPU and the accumulator lacked the necessary power to move the dampers to their failsafe positions. To go so far as to conclude that the reason both the HPU and the accumulator failed was because Green Plains failed to conduct proper maintenance. The third expert does not speculate but provides no alternative.

Finally, Green Plains relies on *Bursch v. Beardsley & Piper*, to argue that the fourth element is not met because its failure to conduct maintenance was foreseeable.

971 F.2d 108, 112 (8th Cir. 1992). While, the Eighth Circuit concluded that a manufacturer could reasonably foresee an end user's failure to read a manual or instructions, it opined further, "[a]s to machine maintenance, [defendants] could have foreseen that [plaintiff] would not maintain the machine in the strict manner recommended in the operating manual." *Id.* Here, there are two important distinctions. First, while the *Bursch* court found it foreseeable that Bursch would not conduct maintenance in the *strict manner* recommended in the operating manual, it did not find it foreseeable to conduct no maintenance at all. Second, whether or not he read the manual, Green Plains' chief boiler engineer testified that he was aware the accumulator needed to be checked. (Systma Dep. at 151.)

Green Plains cites *Montemayor v. Sebright Products, Inc.*, to suggest that a jury should determine whether the fire and explosion was foreseeable. 898 N.W.2d 623, 630-31 (Minn. 2017). There, the court found that when "reasonable persons might differ

as to whether the evidence establishes that the injury was foreseeable, we have consistently submitted the issue to the jury." *Id.* at 630 (internal quotation marks and citation omitted). Here, a reasonable person could not conclude it was foreseeable for Green Plains to fail to conduct any form of maintenance on the accumulator, particularly when its employee testified he knew that such maintenance was necessary.

In conclusion, the Court finds that Green Plains' lack of maintenance was a superseding cause, negating PEI's liability for any alleged design defect. Further, the Court is not convinced that PEI's design was unreasonably dangerous. Accordingly, the Court grants PEI's Motion for Summary Judgment as to Green Plains' negligent and strict products liability design defect claims.

III. Failure to Warn

For a failure to warn claim, Green Plains must show that: "(1) [PEI] had a duty to warn; (2) [PEI] breached that duty by providing an inadequate warning (or no warning at all); and (3) [PEI's] inadequate (or nonexistent) warning caused [Green Plains'] damages." *Kapps v. Biosense Webster, Inc.*, 813 F. Supp. 2d 1128, 1155 (D. Minn. 2011) (citing *Balder v. Haley*, 399 N.W.2d 77, 81-82 (Minn. 1987)). Under Minnesota law, Green Plains' failure to warn claims based on negligence and on strict liability merge into a single cause of action. *Bilotta*, 346 N.W.2d at 623; *see also Piotrowski*, 15 F.3d at 751; *Huber*, 430 N.W.2d at 468 n.1.

A manufacturer has a "duty to exercise ordinary and reasonable care not to expose the potential consumer to an unreasonable risk of harm from the use of its products." O'Hare v. Merck & Co., 381 F.2d 286, 290-91 (8th Cir. 1967). A defendant must have had "reason to know of the dangers of using the product." *Tuttle v. Lorillard Tobacco Co.*, 377 F.3d 917, 924 (8th Cir. 2004). Whether a duty to warn exists is a question of law for the Court to decide. *In re Levaquin Prods. Liab. Litig.*, 700 F.3d 1161, 1166 (8th Cir. 2012) (citing *Balder*, 399 N.W.2d at 81). If a legal duty to warn is found, the factual issue of the adequacy of the warning, breach of the duty, and causation are considered by the fact finder. *Balder*, 399 N.W. 2d at 81. There must be a "direct causal nexus" between the allegedly defective warning and the injury sustained. *Tuttle*, 377 F.3d at 924. That is, in this case, Green Plains must show that if PEI had issued a proper warning, the fire and explosion would not have occurred.

Under its theory of negligence, Green Plains alleges that PEI "failed to provide adequate instructions and warnings for Plant personnel to periodically inspect, monitor and maintain the skid-mounted hydraulic system." (Compl. ¶ 13(c).) Similarly, Green Plains claims that the RTO and its related equipment were defective and unreasonably dangerous because they were designed, manufactured, distributed, and/or sold "without adequate instructions and warnings for Plant personnel to periodically inspect, monitor and maintain the skid-mounted hydraulic system." (Compl. ¶ 17(c).)

Green Plains argues that the limited warnings PEI provided were inadequate to alert Green Plains to the potential dangers of the RTO system. PEI maintains that it provided clear guidance in its warnings and manuals and that, even if the warnings were insufficient, it is inconsequential because Green Plains' employees did not read them.

PEI provided Green Plains with an RTO operation manual which provides a specific warning that proper maintenance is required to prevent fire and explosion hazards:

Periodic cleaning and maintenance of equipment is required. Failure to do so may cause the equipment to malfunction with the potential for fire and explosion hazards.

(Cialkowski Dec. ¶ 16, Ex. 14 ("RTO Maintenance Manual") at OT6553.) The manual further instructs that the HPU should be inspected "completely and satisfactorily by a qualified technician on a daily basis" to check the temperature, hydraulic pressure, hydraulic fluid level, hydraulic leakage, and abnormal noise. (*Id.* at OT574-75.) Additionally, the manual states that the accumulator should be checked upon initial commissioning to ensure it is properly charged with nitrogen. (*Id.* at OT6577.) Under a section labeled "MAINTENANCE," the manual contains an additional warning accompanied by a bomb icon which states in capital letters:

PERIODIC CLEANING AND MAINTENANCE OF EQUIPMENT IS REQUIRED. FAILURE TO UNDERTAKE SUCH ACTION MAY CAUSE EQUIPMENT DAMAGE, IMPROPER FUNCTION, OR THE CREATION OF AN EXPLOSIVE HAZARD.

(*Id.* at OT6585.) In addition to referring the user to an operation manual specifically for the HPU, the section provides instructions to conduct monthly visual inspections of the HPU's reservoir level, fluid leaks, erratic operations, pressure, and filter visual indicators. (*Id.* at OT6586.)

The HPU operation manual also provides relevant instruction on maintenance of the accumulator:³

The accumulator is precharged at time of commissioning to a predetermined pressure with inert nitrogen. A charging and gauging assembly should periodically be attached to the accumulator charge port to check the accumulator precharge, and should be recharged as needed using only dry, inert nitrogen. These operations should be performed with the system off, and all hydraulic pressure relieved from the system. Accumulators which continually lose their precharge over a shortened period of time should be taken out of service.

(Operation Manual at MINDEN017996.) It further specifies that in addition to charging the accumulator during commissioning, "it is suggested that a check be made a week after installation, and thereafter once a month." (*Id.* at MINDEN018072.) The HPU manual also warns that the personnel operating the HPU must be familiar with its maintenance and use:

It is imperative that personnel involved in the installation, service, and operation of the power unit be familiar with how the equipment is to be used. They should be aware of the limitations of the system and its component parts; and have knowledge of good hydraulic practices in terms of safety, installation, and maintenance.

(*Id.* at MINDEN017985.)

Green Plains contends that the warnings were insufficient for a number of reasons, largely that they failed to warn of the accumulator's safety function and what could happen if it failed. (Opp. at 15 \$56, 16 \$59.) Green Plains also argues that the

The Court finds it inconsequential that Green Plains' HPU manual referenced an accumulator with a piston as opposed to a bladder. (Opp. at 11 ¶ 37.) The pertinent instructions were the same in each manual: the accumulator needs to be checked every 30 days. (Doc. No. 87 ("Transcript") at 6; *see also* Operation Manual at MINDEN018072.)

accumulator was not mentioned on the daily, monthly, or annual inspection checklists in the RTO's operation manual. (Id. ¶ 58.)

The Court finds that the warnings in the manuals were sufficient. The RTO manual explained why the hydraulic power unit was important and described the requirements for routine inspection and maintenance. It also provided a specific warning that a failure to conduct periodic cleaning and maintenance on the equipment could result in a fire and explosion. While Green Plains argues that the RTO manual should have contained more detail about the safety function of the accumulator, "a warning is not insufficient simply because it fails to explain the consequences if it is disregarded." *Rosholt v. Blaw-Know Const. Equip. Corp.*, Civ. No. 04-1181, 2006 WL 839505, at *3 (D. Minn. Mar. 29, 2006). Here, there was sufficient warning that it was necessary to maintain the equipment and its component parts. Further, the HPU manual explains the importance of and provides instructions on how to check the accumulator. The HPU manual also explains that the accumulator should be checked upon commissioning and thereafter once a month, and that it should be replaced if it is unable to keep a charge.

Even assuming the warnings were inadequate, there is not a causal link between the warnings and the fire and explosion because there is nothing in the record to indicate that Green Plains' employees read the warnings. To the contrary, Green Plains' chief boiler engineer testified that while he glanced at the RTO and HPU manuals, he did not read all of them. (Systma Dep. at 142, 151.)

Minnesota courts have consistently held that there is no causal link between an alleged inadequate warning and injury absent actually reading the warning. *See Lindsay*

v. St. Olaf Coll., No. A06-2416, 2008 WL 223661, at *5 (Minn. Ct. App. Jan. 29, 2008); Marko v. Aluminum Co. of Am., 1994 WL 615004, at *2 (Minn. Ct. App. Nov. 8, 1994); Tropple v. Black & Decker, Civ. No. 13-2907, 2015 WL 4992011 (D. Minn. Aug. 20, 2015) (applying Minn. law). Here, Green Plains has not provided specific facts in the record to indicate that any employee actually did read the warnings such that the warnings were inadequate to prevent the fire and explosion. To defeat summary judgment, the nonmoving party must demonstrate the existence of specific facts in the record that create a genuine issue for trial. Krenik v. Cty. of Le Sueur, 47 F.3d 953, 957 (8th Cir. 1995).

The sufficiency of the warnings and Green Plains' failure to read them is fatal as a matter of law to both its negligence and strict products liability claims that PEI failed to provide adequate instructions and warnings. As a result, PEI is entitled to summary judgment on the failure to warn claims.

CONCLUSION

The Court finds that the RTO and its related equipment were not unreasonably dangerous in the manner they were designed, manufactured, distributed, and/or sold. Even allowing for some sort of defect, the Court finds that Green Plains' lack of maintenance was a superseding cause negating PEI's liability. Further, the Court finds that PEI provided adequate instructions and warnings for Plant personnel to periodically inspect, monitor, and maintain its hydraulic system.

ORDER

Based on the files, records, and proceedings herein, and for the reasons set forth above, **IT IS HEREBY ORDERED** that:

1. Defendants' Motion to for Summary Judgment (Doc. No. [74]) is **GRANTED**.

2. Plaintiff's Complaint (Doc. No. [1]) is **DISMISSED WITH PREJUDICE**.

LET JUDGMENT BE ENTERED ACCORDINGLY.

Dated: October 4, 2018 <u>s/Donovan W. Frank</u>

DONOVAN W. FRANK United States District Judge