

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

HAROLD GOETZ,

Plaintiff,

v.

GRAND RIVER NAVIGATION  
COMPANY, INC.,

Defendant.

Case No. 16-14489

SENIOR U.S. DISTRICT JUDGE  
ARTHUR J. TARNOW

U.S. MAGISTRATE JUDGE  
R. STEVEN WHALEN

**ORDER GRANTING IN PART AND DENYING IN PART DEFENDANT’S MOTION FOR  
SUMMARY JUDGMENT [24]**

Plaintiff Harold Goetz worked for Defendant Grand River Navigation Company (“Grand River”) as an assistant engineer on the James Kuber Tug Victory vessel for approximately two-and-a-half years, from June 2011-January 2014. During that time, he was exposed to chemical fumes and vapors, which, Goetz claims, caused him irreparable physical injury and mental pain and anguish.

In late December 2016, Goetz filed his Complaint [Dkt. 1], raising claims under the Jones Act, 46 U.S.C. §§ 30101, 30104, *et seq.* Goetz alleges that as a result of Grand River’s negligence, he has suffered physical and mental injury, been rendered disabled, and lost earning capacity and the ability to work. He seeks lost wages and medical expenses for these injuries.

Nearly a year to the day after Goetz initiated this lawsuit, Grand River filed a Motion for Summary Judgment [24], in which it argued that dismissal is appropriate because Goetz has failed to provide sufficient evidence of causation.

For the reasons set forth below, the Court will **GRANT IN PART** and **DENY IN PART** Grand River's Motion for Summary Judgment [24].

## **FACTUAL BACKGROUND**

### **I. Conditions on the Ship**

Plaintiff Harold Goetz worked for Defendant Grand River as an assistant engineer on Grand River's vessel, the James Kuber Tug Victory, a tug/barge combination, during the 2011-2014 shipping seasons. He worked for five or six months each year. (Pl.'s Ex. 10 at 131:13-14).

Goetz primarily worked in the vessel's engine room, where he was repeatedly exposed to harmful oil fumes and vapors. Some of these fumes were emitted by the heating of the heavy fuel, IFO-180, which, according to Goetz, smelled like asphalt and were "everywhere." *Id.* at 266:16. Heavy fuel could be found lying in the bilge and spill tank, and often leaked from the fuel pumps. In addition, Goetz used cleaning materials that contained lube oil fumes and chemicals. The cleaners gave Goetz a "dizzy-feeling." *Id.* at 321:6.

Other crew members on the vessel also noticed the overwhelming fumes. Chief Engineer John Hemmer said that due to improperly working equipment,

“[t]he fuel oil purifier . . . caus[ed] heavy fuel (IFO 180) to . . . overflow into the open air bilge.” (Def.’s Ex. 14 at Pg. ID 388). Because the crew generally didn’t have enough time to properly refuel the ship, they couldn’t “discharge all of the slop oils.” *Id.* Hemmer said that “the office” was asked “to arrange better waste oil disposal,” but it “did not occur.” *Id.* at Pg. ID 389. Chief Engineer Jay Downen also “complained . . . about multiple mechanical problems,” as well as “about . . . [t]he IFO-180 fuel [ ] leak[ing] into the bilge.” *Id.* at Pg. ID 399. When he got home from work, Hemmer’s “clothes had such odor that [his] family would not allow [his] work bags into the living area of [the] home.” *Id.* at Pg. ID 390.

Assistant engineer John O’Connor echoed much of this information. He said that “[t]he sounding caps in [the staterooms] leaked and fumes in both rooms were bad.” *Id.* at Pg. ID 392. He also described “a mist of fumes in the air due to the fuel purifier breaking over and shooting to the bilge.” *Id.* Crewmember Terrence Evans<sup>1</sup> said that the vapor and fumes were so bad that “[o]n some days, it was like a fog it was so thick.” *Id.* at Pg. ID 395. Due to intermediate and diesel fuel leaking from a heat exchange unit, “the engineers were continuously exposed . . . breathing the fumes . . . and getting it on [their] clothing and hands.” *Id.* Crew members “ended up getting the [cleaning] contaminants . . . on [their] hands and forearms” because there was not a proper cleaning facility. *Id.* Evans also said that “[i]t was

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<sup>1</sup> It appears that Evans was a crewmember on Grand River’s vessel during the 2013 shipping season.

not unusual to cough up black gunk after being in the engine room for an extended period during maintenance events.” *Id.* at Pg. ID 397.

## **II. Goetz’s Medical History**

Goetz suffers from “burning in [his] feet, [his] ankles, [and his] calves,” and experiences pain and numbness. (Def.’s Ex. 1 at 74:20-25). After Goetz left the vessel in 2014, his symptoms continued to worsen. *Id.* at 334:6-8.

On February 12, 2014, Dr. Timothy Tetzlaff treated Goetz for a burning sensation in his feet, pain in his knees, and joint pain. Goetz had X-rays taken approximately two weeks later. The X-rays “were unremarkable except a small calcaneus spur.” (Def.’s Ex. 2 at Pg. ID 158).

Goetz treated with Dr. Robert Spitzer, a neurologist, on April 23, 2014. In the Clinic Note, Dr. Spitzer indicated that “[f]or years, [Goetz] has had mild symptoms in his feet, but it has been progressively getting worse, and in the last season, has become intolerable.” (Def.’s Ex. 6 at Pg. ID 178). He also “note[d] that in [Goetz’s] occupation, he has been exposed to a lot of heavy metals including lead paint both in terms of physical and respiratory exposure.” *Id.*

Dr. Tetzlaff examined Goetz again on June 24, 2014. Dr. Tetzlaff concluded that “Neuropathy [w]as a likely cause of” Goetz’s pain. (Def.’s Ex. 2).

In November 2014, another neurologist, Dr. Vessela T. Giger-Mateeva, determined that Goetz’s “[n]eurological examination [was] unremarkable” and that

his “[c]ervical spine MRI did not reveal any significant abnormalities, to explain any of patient’s symptoms.” (Def.’s Ex. 12 at Pg. ID 323). She “suspect[ed] that there is a superimposed small fiber neuropathy associated with the burning sensation in [Goetz’s] feet.” *Id.* Dr. Giger-Mateeva “reviewed the literature” about the effects of IFO-180 heavy fuel oil “on the peripheral nervous system,” and was unable to identify “any clinical evidence based information on this topic.” *Id.* She also mentioned, however, that “[i]t is possible that there is some contribution from [an IFO-180 heavy fuel environment] to the development of new and more severe symptoms.” *Id.* She recognized that “this will be difficult to prove as there is no known marker to correlate with a potential peripheral nervous system damage from the substance.” *Id.*

Goetz treated with Dr. Roman Politi in February 2016. He opined that, “more likely than not, Mr. Goetz is suffering from Polyneuropathy caused by an environmental and/or occupational toxic exposure.” (Def.’s Ex. 3).

After reviewing Goetz’s medical records and notes from examinations and radiological testing, Dr. Tetzlaff opined that Goetz’s neuropathy “is not caused by a structural abnormality in his neck or low back, a B-12 deficiency, or a condition a podiatrist can treat.” (Def.’s Ex. 2). Furthermore,

[I]f exposure to IFO-180 Heavy Fuel Flames and/or IFO-180 Heavy Fuel Exhaust, and/or IFO-180 Heavy Fuel exposure to the skin can cause neuropathy, then, more likely than not, the exposure either caused the

neuropathy or, at a minimum, if the exposure did not cause the neuropathy, then the exposure in combination with other factors caused the neuropathy.

*Id.*

### **LEGAL STANDARD**

Summary judgment is appropriate “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” FED. R. CIV. P. 56(c). Grand River bears the burden of establishing that there are no genuine issues of material fact, which may be accomplished by demonstrating that Goetz lacks evidence to support an essential element of his case. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). Goetz cannot rest on the pleadings and must show more than “some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co., Ltd.*, 475 U.S. at 586-87. Goetz must “go beyond the pleadings and by . . . affidavits, or by the ‘depositions, answers to interrogatories, and admissions on file,’ designate ‘specific facts showing that there is a genuine issue for trial.’” *Celotex Corp.*, 477 U.S. at 324 (*quoting* Rule 56(e)); *see also United States v. WRW Corp.*, 986 F.2d 138, 143 (6th Cir. 1993).

### **ANALYSIS**

The Jones Act permits “[a] seaman injured in the course of employment . . . to bring a civil action at law, with the right of trial by jury, against the employer.”

46 U.S.C. § 30104. “Proof of negligence (duty and breach) is essential to recovery under the Jones Act.” *Perkins v. Am. Elec. Power Fuel Supply, Inc.*, 246 F.3d 593, 598 (6th Cir.), *cert. denied*, 534 U.S. 994 (2001). To establish negligence, Goetz must show that Grand River “failed to provide a safe workplace by neglecting to cure or eliminate obvious dangers of which [it] or its agents knew or should have known and that such failure caused [Goetz’s] injuries and damages.” *Rannals v. Diamond Jo Casino*, 265 F.3d 442, 450 (6th Cir. 2001), *cert. denied*, 534 U.S. 1132 (2002).

If Goetz proves Grand River’s negligence, he need only show that Grand River’s negligence “is the cause, in whole or part, of [his] injuries.” *Perkins*, 246 F.3d at 598. “In essence, there is a reduced standard for causation between the employer’s negligence and the employee’s injury.” *Id.*

In considering summary judgment involving Jones Act claims, the Court is mindful of the “policy of providing an expansive remedy for seamen who are injured while acting in the course of their employment.” *Rannals*, 265 F.3d at 447. The Sixth Circuit has instructed that courts should be “reluctan[t] to dispose of Jones Act claims through summary judgment” given the “very low evidentiary threshold for submission [of Jones Act claims] to a jury.” *Daughenbaugh v Bethlehem Steel Corp., Great Lakes Steamship Div.*, 891 F.2d 1199, 1207 (6th Cir. 1989) (internal quotations omitted). “[E]ven marginal claims are properly left for

jury determination.” *Id.* at 1205. Goetz “must offer ‘more than a scintilla of evidence in order to create a jury question on the issue . . . but not much more.’” *Churchwell v. Bluegrass Marine, Inc.*, 444 F.3d 898, 903 (6th Cir. 2006).

Because this is a toxic tort cause of action,<sup>2</sup> Goetz must present admissible general-causation and specific-causation evidence. “For general causation, the issue is whether the chemicals were capable of causing the victim’s medical conditions, whereas with specific causation, the issue is whether the chemicals did in fact cause the plaintiff’s specific medical conditions.” *Hendrian v. Safety-Kleen Systems, Inc.*, No. 08-14371, 2015 WL 4770966, at \*4 (E.D. Mich. Aug. 13, 2015) (citing *Trice v. Oakland Dev.*, 2008 WL 7488023, at \*11 (Mich. Ct. App. Dec. 16, 2008)). To prove causation, Goetz must show: “(1) that the alleged toxin was capable of causing injuries like those suffered by the plaintiff (general causation) and (2) that the toxin was the cause of the plaintiff’s injury (specific causation).” *Id.*

### **A. General Causation**

“General causation is established by demonstrating, often through a review of scientific and medical literature that exposure to a substance can cause a

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<sup>2</sup> Plaintiff “alleges he has developed a disease because of exposure to a toxic substance negligently released by the defendant.” *Henry v. Dow Chemical Co.*, 473 Mich. 63, 68 (2005).



particular disease.” *In re Dow Corning Corporation*, 541 B.R. 643, 654 (E.D. Mich. 2015).

Goetz has submitted reports and declarations from a number of scientific and medical professionals showing that neurotoxic agents, including n-hexane, were 1) present in the fuel used on the vessel, and 2) capable of causing his medical ailments. Dr. Michael J. Wade, Ph.D.,<sup>3</sup> observed that Grand River’s vessel used diesel fuel (“No. 2 fuel oil”) and “intermediate fuel,” or Bunker C Fuel Oil (“No. 6 fuel oil”) in its normal operations. These fuels contained “neurologically-active mono-cyclic aromatic hydrocarbons . . . and [ ] carcinogenic polycyclic aromatic hydrocarbons.” (Def.’s Ex. 15 at 3). “[C]ombustion of [these] fuels produces exhaust that includes . . . fuel derived hydrocarbons.” *Id.* “[H]ard gas chromatographic evidence shows that normal alkanes such as n-hexane as well as other volatile hydrocarbons lost to the air of a confined space – such as a ship’s engineering compartment . . . will accumulate in the ship’s air.” (Pl.’s Ex. 1 at 2). “Any human being present in such a confined space . . . will be chronically exposed to hazardous hydrocarbons such as n-hexane and other compounds volatilized into the air.” *Id.*

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<sup>3</sup> Dr. Wade is the Principal Scientist at Wade Research, Inc. He is degreed in organic geochemistry and has experience “in the chemistry of petroleum and petroleum-derived products such as fuel oils.” (Pl.’s Ex. 2 at 1 at 1).

Dr. Wade noted that the World Health Organization (“WHO”) has classified fuel oils and engine exhausts “as possibly carcinogenic to humans.” *Id.* at 4. In addition, “exposure to such fuel oils as No. 2 through No. 6 fuel oil and their chemical constituents are widely acknowledged to cause human neurological and carcinogenic responses.” *Id.*

The working conditions on Grand River’s vessel were also affected by the cleaning solutions used by crewmembers. Dr. Wade said that “[w]hen use of such degreaser solvents was limited to a confined engine working space, inhalation and dermal exposure to hydrocarbons . . . has to be considered likely.” *Id.*

Dennis M. Stainken, Ph.D.<sup>4</sup> examined Material Safety Data Sheets (“MSDS”) for IFO-180 oil and diesel oil. Exposure to these substances can lead to, among other things, dizziness, blurred vision, and fatigue. (Pl.’s Ex. 2 at 5). The peripheral and central nervous systems can be affected. *Id.* Dr. Stainken also stated that “[t]he hexane component” in both the fuel oils and the cleaning materials has been known “to cause peripheral nerve damage (polyneuropathy).” *Id.* at 7.

Dr. Stainken noted that carbon monoxide, which “is formed in the combustion of fuel oils[,] [ ] would be present in the exhaust vented into [Plaintiff’s] workplace.” *Id.* at 9. He cited several studies showing that individuals

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<sup>4</sup> Dr. Stainken’s “studies and research have focused on the chemistry of hydrocarbons, fuels and crude oils,” as well as “their behavior, toxicology and movement in the environment.” (Pl.’s Ex. 2 at 1).

suffering from “carbon monoxide intoxication identified peripheral neuropathy as a sequelae of the carbon monoxide exposure.” *Id.* Individuals affected with carbon monoxide poisoning “may present with polycythemia, increased hematocrit, [as well as] erythrocyte count.” *Id.* Dr. Stainken observed that long term carbon monoxide exposure may also cause “central and peripheral nervous system damage.” *Id.*

According to Dr. Dahlgreen, “[t]here are hundreds of studies on chemical causes of peripheral neuropathy (PN) from [ ] n-hexane, but 1,2,4 trimethylbenzene has [ ] been linked to peripheral neuropathy as well.” (Def.’s Ex. 16 at 7). He concluded that n-hexane “has been shown in the scientific literature to be a well-known cause of peripheral neuropathy.” (Pl.’s Ex. 3 at 9).

Given the relaxed burden of proof that applies in Jones Act cases, Goetz has presented evidence from which a jury could infer that he was exposed to harmful levels while working on the James Kuber Victory vessel. Reviewing the expert reports and the testimony from the crewmembers, “a reasonable jury could conclude that [n-hexane] is capable of producing many of the symptoms experienced by” Goetz. *Gass v. Marriott Hotel Services, Inc.*, 558 F.3d 419, 431-32 (6th Cir. 2009).

## **B. Specific Causation**

To establish specific causation, Goetz “must show that in [his] case, exposure to the substance actually caused the alleged injury.” *In re Meridia Products Liability Litigation*, 328 F.Supp.2d 791, 798 (N.D. Ohio 2004) (citing *Sterling v. Velsicol Chem Corp.*, 855 F.2d 1188 (6th Cir. 1988)).

Grand River contends that Goetz cannot establish specific causation because Goetz’s experts don’t identify 1) the specific chemicals that caused his medical condition, 2) the level of exposure to each chemical that would be necessary to cause the medical condition, or 3) the actual level of exposure that he experienced.

Dr. Wade stated that the crewmembers on Grand River’s vessel “were being literally dosed with chemical contaminants within the fuel oils.” (Def.’s Ex. 15 at 5). Additionally, the “working conditions in the tug boat Victory gave rise to the direct skin exposure of fuel oil-derived (both neurologic and carcinogenic) chemicals to those human beings working in the engine space of the tug boat.” *Id.* at 5. He characterized “[t]he conditions experienced by Mr. Goetz” as “a veritable ‘Perfect Storm’ of contaminant exposure.” *Id.* at 6. He further stated:

Given the neurological and carcinogenic hydrocarbons known to be present in degreaser chemical solvents . . . as well as the fuels oils as No. 2 and No. 6 fuel oil, it is to a reasonable degree of scientific certainty that a human biological response to exposures of such chemicals would be to exhibit a nerve system response such as peripheral neuropathy reported by Mr. Goetz.

*Id.*; see also Pl.’s Ex. 1 at 3.

Dr. Dahlgreen similarly reported that “[t]he diesel and bunker oil fuel used by Mr. Goetz contains neurotoxic agents that are the likely cause of his toxic, symmetrical peripheral neuropathy.” (Def.’s Ex. 16 at 5). Dr. Dahlgreen cited to a study finding that “short term exposure to n-hexane caused severe effects of peripheral neuropathy.” *Id.* at 7. Another study indicated that “low level exposure . . . caused peripheral neuropathy.” *Id.*

In his October 16, 2017 evaluation, Dr. Stainken opined that “[d]evelopment of neuropathy by Mr. Goetz would be consistent with the published medical and scientific literature as causing the symptoms.” (Def.’s Ex. 14 at 29). He noted that Goetz’s symptoms “match those associated with exposure to carbon monoxide,” including paresthesia, weakness, numbness, balance disturbance, and difficulty walking. *Id.* at 26. Dr. Stainken also stated that Goetz “did not have these symptoms prior to exposure.” *Id.*

This case is analogous to *Gass v. Marriott Hotel Services, Inc.*, 558 F.3d 419 (6th Cir. 2009). There, the plaintiffs alleged that they suffered health problems after being exposed to pesticides sprayed in their hotel room. The court held that there was evidence for a reasonable jury to conclude that the defendants’ negligence caused plaintiffs’ injuries. The court noted that the warnings on the pesticides’ MSDS matched many of plaintiffs’ symptoms. The plaintiffs experienced, among other things, headaches, dizziness, and fatigue. Plaintiffs’

treating doctor also attributed some of their symptoms to pesticide poisoning. *Id.* at 432.

“Should a jury credit Plaintiffs’ testimony,” the court explained, “it reasonably could conclude that the alleged cloud of unidentified toxic chemicals sprayed in Plaintiffs’ hotel room caused Plaintiffs’ injuries.” *Id.* at 434. Plaintiffs’ scientific evidence – the MSDS – tended to prove their case because it showed that the pesticide was “capable of causing their symptoms.” *Id.* at 433. Moreover, the defendant failed to prove “an absence of causation by introducing verifiable scientific evidence.” *Id.*

*Gass*’s reasoning applies here. “It does not take an expert to conclude that, under these circumstances, [Grand River] more likely than not [is] responsible for [Goetz’s] injuries.” *Id.* Goetz has produced scientific evidence showing that the n-hexane and carbon monoxide in the heavy fuel are capable of causing his symptoms. The fact that Goetz worked in a non-ventilated engine room, in which these dangerous chemicals were present, for three years, bolsters his position. In addition, Grand River’s own employees testified that crewmembers did not wear respirators, nor did Grand River “test[ ] the air in the engineering spaces for hazardous chemicals.” (Pl.’s Ex. 1 at 2). At this point, viewing this, and the other evidence, in Goetz’s favor, a reasonable jury could conclude that Goetz’s

symptoms were caused by his exposure to the n-hexane and carbon monoxide in the fuel and cleaning solutions.

### CONCLUSION

For the reasons stated above,

**IT IS ORDERED** that Defendant's Motion for Summary Judgment [22] is **GRANTED IN PART** and **DENIED IN PART**. The motion is granted to the extent that Plaintiff alleges that substances other than n-hexane and carbon caused his peripheral neuropathy. Plaintiff may proceed on his claims as to how n-hexane and carbon monoxide caused his peripheral neuropathy.

**SO ORDERED.**

Dated: August 23, 2018

s/Arthur J. Tarnow

Arthur J. Tarnow

Senior United States District Judge