IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation: Muss v. 735084 Alberta Inc., 2024 BCSC 2078

Date: 20241115 Docket: S210396 Registry: Vancouver

Between:

Justin Muss

Plaintiff

And

735084 Alberta Inc. doing business as Earth Management, and Jiangxi Xinyu Guoke Science and Technology Co., Ltd.

Defendants

Before: The Honourable Madam Justice Wilkinson

Reasons for Judgment

Counsel for the Plaintiff:

No other appearances

Place and Date of Trial:

Place and Date of Judgment:

M.L. Segal B.A. Leibel

Vancouver, B.C. November 4, 2024

Vancouver, B.C. November 15, 2024

Table of Contents

INTRODUCTION	4
BACKGROUND AND HISTORY OF THE LITIGATION	4
THE PRODUCT AT ISSUE: THE STAR BLAZER BEAR BANGER	5
The Accident	6
Employment History	8
Pre-Accident Health and Expected Career Path	8
Injuries	9
Temporary Injuries to Hand, Legs and Vision	9
Permanent Hyperacusis and Tinnitus	
Employment Post-Incident	11
Social and Emotional Impact	14
THE PLAINTIFF'S SPOUSE	16
DR. DAVIN WILSON CHARK - OTOLARYNGOLOGIST	
THE EVIDENCE OF EARTH MANAGEMENT'S REPRESENTATIVE	
Design and Production of Star Blazer Bear Bangers	21
History of Problems with Star Blazer Bear Bangers	
Recall	
CMP Sports	24
ASSESSMENT OF THE EVIDENCE	
Credibility of the Plaintiff's Evidence	
LIABILITY	
Jiangxi	
Earth Management	
DAMAGES	
Non-Pecuniary Damages	
Pain, Suffering, Loss of Enjoyment and Loss of Amenities	
Future Loss of Earning Capacity	
Has the plaintiff's earning capacity been impaired?	
Quantifying Future Income Loss	41
Special damages	
Cost of Future Care	
Past and future cost of Housekeeping	

PUNITIVE DAMAGES	
CONCLUSION	
COSTS	

Introduction

[1] These are my reasons for judgment in this personal injury claim alleging negligence against the defendants. The trial proceeding on the basis of affidavit evidence only, and in the absence of the defendants, pursuant to an order made by Justice Wolfe on October 1, 2024, at a trial management conference.

[2] The plaintiff seeks damages for future loss of income, past care costs and out-of-pocket expenses, costs of future care, non-pecuniary losses, loss of housekeeping capacity, and punitive damages.

[3] For the reasons that follow, I find that the plaintiff is entitled to compensation under all heads of damages and order a total award of \$795,176.86.

Background and history of the litigation

[4] This action was commenced on January 13, 2021, and arises from an accident involving a defective bear banger cartridge.

[5] The plaintiff, Mr. Muss suffered injuries when he tried to use a bear banger explosive to deter a bear while he was working as a gas and field operator in a remote area approximately 170km north of Fort St. John, BC (the "Accident").

[6] The Accident occurred on May 18, 2019.

[7] The cause of action for damages arising from the Accident vested in WorkSafeBC pursuant to section 10(6) of the *Worker's Compensation Act,* RSBC, 1996, c. 492. This action is brought by WorkSafeBC in the name of Mr. Muss.

[8] The defendant 735084 Alberta Inc. doing business as Earth Management ("Earth Management") filed its response to civil claim on February 22, 2021.

[9] In September 2021, the plaintiff was granted leave to add the party Jiangxi Xinyu Guoke Science and Technology Co., Ltd.("Jiangxi"). Jiangxi did not file a response to civil claim and there is no lawyer on record for this defendant. Default judgement against Jiangxi was granted on November 4, 2024. As such, all of the alleged facts with regard to Jiangxi are deemed to be admitted.

[10] On October 11, 2023, the plaintiff was cross-examined by counsel for Earth Management. On October 12, 2023, counsel for the plaintiff cross-examined Mr. Peter Mueller, the president and representative of Earth Management.

[11] On September 3, 2024, counsel to the plaintiff received correspondence from counsel to Earth Management indicating that counsel to the defendant was no longer acting in this matter. The defendant has not retained counsel and is self-represented.

[12] On September 24, 2024, Earth Management's insurance broker, under instruction from its insured, provided to the plaintiff a copy of Earth Management's insurance policy for 2019, the year of the Accident.

[13] At a Trial Management Conference on October 1, 2024, Justice Wolfe granted an order that the trial may proceed without the defendant in attendance, in which case the trial may be conducted through affidavit evidence.

[14] On October 18, 2024, the plaintiff served their trial affidavits, trial record, and trial certificate on Earth Management. On October 28, 2024, Earth Management confirmed receipt of the plaintiff's affidavits, trial record and trial certificate. Earth Management also confirmed that it had notice of the trial and would not attend.

[15] I conserved the affidavit evidence of the plaintiff, Otolaryngologist, Dr. Davin Chark, a WorkSafeBC employee, the plaintiff's spouse, and excerpts from Mr. Mueller's examination for discovery in reaching my decision. The evidence is uncontested.

The product at issue: the Star Blazer Bear Banger

[16] Mr. Mueller provided evidence regarding the nature, purpose, design and manufacturing of bear bangers and in particular the Star Blazer bear banger.

[17] A bear banger is a pyrotechnic explosive device used to deter bears away from the user. There are two separate pieces required to use a bear banger: the launcher, either in pen or gun launcher, and the bear banger cartridge. The bear banger at issue in this litigation was used in a pen launcher.

[18] To use a pen launcher bear banger, the user must load the cartridge into the launcher and move the trigger into the latched position. Once it is loaded, the user will hold the launcher aiming straight up above them and then pull the trigger to launch the cartridge up. The cartridge then launches into the air away from the user, detonating while in the air and creating a loud bang designed to scare the bear away.

[19] Bear bangers are explosives that are regulated and have to be stored in specific conditions because they are hazardous.

[20] The bear banger cartridge used in this case was a Star Blazer branded cartridge designed and distributed by Earth Management and manufactured by Jiangxi under the direction of Earth Management.

[21] The plaintiff purchased the Star Blazer bear banger from CMP Sports, a customer of Earth Management, on May 9, 2019.

[22] Earth Management had stopped distributing the Star Blazer bear bangers in October 2017, due to a defect that caused premature detonation.

The Accident

[23] On May 18, 2019, the plaintiff was 32 years old and working alone at a production tank farm (an oil and gas facility) about 170km north of Fort St. John.

[24] While he was working, the plaintiff observed a "good-sized" black bear around 50 feet away from him, curiously sniffing up and down while moving towards him. The plaintiff tried yelling and honking his truck's horn to deter the bear but the bear continued to move closer. Based on his experience and training, the plaintiff recognized that the bear would not go away without further intervention and decided to use a bear banger to try and further deter the bear so he could grab his tools and clean up his task.

[25] The plaintiff grabbed his usual TruFlare pen launcher and one of the Star Blazer bear banger cartridges that he had bought the week prior. He secured himself between his truck's roof frame and the driver's door, loaded the cartridge as usual, and held the loaded pen launcher in his right hand with his arm extended.

[26] The plaintiff tried yelling at the bear one last time then, seeing that the bear was not deterred, he extended his right arm straight up into the air holding the loaded pen launcher, and released the trigger from the secure position.

[27] As soon as the plaintiff released the trigger, he heard a really loud bang and felt pain in his right side. He could not hear and everything looked blurry around him. He was confused and did not know what had happened.

[28] After a few seconds of disorientation, the plaintiff figured out that something had failed with the bear banger and put the pen launcher down on the windshield. He stepped down from the truck and checked if the bear was still around.

[29] The plaintiff first noticed that his right hand was bleeding and saw that the skin between his pointer finger and thumb had been peeled back. Scared that other, more serious, parts of his body had been cut, he began checking his face and neck but did not find any other blood. He then bandaged his hand using a pad from his first aid kit.

[30] After that, he found a piece of shrapnel sticking out of his left leg. He took off his coveralls to get a closer look and the piece of shrapnel fell out. His leg was not bleeding but he saw that the area around where the shrapnel entered his leg was burned and he could not feel anything there. The plaintiff began to panic about the lack of feeling in that area and worried that he had suffered other injuries that he could not feel yet.

[31] The plaintiff did not feel like it was safe for him to drive with his injuries and called his plant operator to request that someone pick him up. He got picked up by a local operator and taken back to the plant, where he received first aid and was sent to the hospital by his foreman. The plaintiff went to the hospital, where they examined his injuries and checked to make sure there was no other shrapnel left in his body.

Employment History

[32] The plaintiff has worked as a gas field operator since 2008. His job involves working alone in remote locations and working in environments with loud machinery. At the time of the Accident the plaintiff earned \$72,000 per year.

[33] The plaintiff has received annual bear safety training through his job since 2008. This training includes instructions on how to safely use a bear banger to deter a bear.

[34] Over the course of his career, the plaintiff has used a bear banger hundreds of times and was a comfortable, experienced user of them prior to the Accident.

[35] Hearing is essential for the plaintiff's job. It assists him with troubleshooting problems, noticing potential problems before they escalate, communicating effectively on-site and in meetings, and ensuring his safety on-site.

Pre-Accident Health and Expected Career Path

[36] Prior to the Accident, the plaintiff was generally healthy and had no vision or health issues to note. He had his hearing tested for work annually and had above average hearing. He frequently used his hearing to help him detect problems like leaks and bad valves.

[37] The plaintiff expected to continue to gain further experience and eventually progress into a management role, such as an assistant foreman, within 3-5 years. This advancement would allow him to earn \$100,000 per year salary plus stock options, full medical and dental with a health spending account and an annual bonus

Page 9

of 7% or more. Increasing seniority within the organization would come with more inoffice responsibilities, including increasing amount of phone calls and more time closer to his family.

[38] During his weeks off from work, the plaintiff enjoyed getting together with friends and family at least one or two days. He would also go to catch up with friends at the local sports lounges at least one or two days during his off-weeks.

[39] The plaintiff enjoyed working in the yard, mowing the lawn, chopping wood and making carpentry projects.

[40] The plaintiff also enjoyed listening to music. He and his father would often listen to music together and the plaintiff appreciated the quality of his father's sound system. The plaintiff was also an avid guitar player and could play based on sound.

[41] Prior to the Accident, the plaintiff used a gap in his employment to care for his first daughter Emma and his wife following a complicated birth. After he returned to work he spent as much time as possible with Emma. Emma was about one year old at the time of the Accident.

[42] The plaintiff was a healthy person who looked after himself. He took pride in being a competent and healthy person and this formed an important part of his identity.

Injuries

[43] I find that the plaintiff experienced injuries to his right hand, both legs, his vision, and his hearing which were caused by the Accident.

Temporary Injuries to Hand, Legs and Vision

[44] His right hand was cut between his pointer finger and thumb, which was very painful. It healed in a couple of weeks. The plaintiff has scars on his hand but no longer experiences pain from this injury.

[45] On his left leg, the plaintiff had a puncture, a burn and a bit of a scrape where the shrapnel entered his body. He experienced pain from this for injury for about three to four weeks while it healed. The plaintiff has a scar in that area but no longer experiences pain from this injury.

[46] The plaintiff had a bruise on his right leg and experienced pain there for about two weeks after the Accident. It is no longer painful for him.

[47] The plaintiff's vision became instantly blurry after the bear banger went off. His vision in his right eye was cloudy. The plaintiff was informed by an optometrist that the explosion had strained the muscles in his eyes and his vision should return to normal. His vision returned to normal about a week after the Accident.

Permanent Hyperacusis and Tinnitus

[48] The plaintiff experienced instant hearing loss when the bear banger went off. For a few weeks after the Accident, the plaintiff's hearing was muffled, he could barely hear out of his right ear, and he experienced tinnitus in both ears.

[49] There was minor gradual improvement to the plaintiff's hearing over six months to a year after the Accident. After the first six months his hearing did not further improve.

[50] For the first year after the Accident, the plaintiff had to wear ear plugs while travelling to work and inside his ATV helmet, along with double ear protection in areas he would not have before.

[51] The plaintiff was referred to Dr. Chark to have his hearing assessed shortly after the Accident. He continues to see Dr. Chark, though he has reduced the frequency of appointments because his hearing is no longer improving.

[52] The plaintiff experiences a constant low ringing in his ears that gets worse with any loud noise, prolonged exposure to noise or exhaustion. His injuries continue to cause him pain and discomfort, particularly if there are loud noises. He also now experiences psoriasis in his ears because of how often he needs to wear earplugs. [53] The plaintiff also suffers from diminished hearing capacity and increased sensitivity to environmental sounds. Any background noise will make it difficult for him to hear because he feels that he hears all of the noise at once. He often misses portions of conversations and struggles to speak on the phone.

[54] The plaintiff has tried all treatments recommended by Dr. Chark during his appointments, including hearing aids, tinnitus apps, and hearing earplugs. The hearing aids made his hearing worse and he returned them to the store. He continues to use a tinnitus phone application, Tinnitus Calmer, to minimize his symptoms when it flares up but it does not improve his hearing. The dual tone earplugs that the plaintiff purchased have been helpful for him in loud environments, such as in facilities at work, and he plans to continue to use them. The earplugs will not improve his hearing.

[55] The plaintiff understands that his hearing will not improve, and will in fact get worse as he ages. He understands from Dr. Chark, that the only treatment that he hasn't tried that might somewhat alleviate his symptoms is a treatment offered in the US called Lenire. Dr. Chark recommends this treatment but it is not offered in Canada. The plaintiff is prepared to travel to the United State of America, in Washington State, to have this treatment but he is not currently able to afford to do so.

[56] The plaintiff also understands from Dr. Chark that he should get yearly hearing tests. He will not incur any expense for these tests so long as he is employed in similar employment.

Employment Post-Incident

[57] The plaintiff returned to work on modified duties to complete his shift after the Accident. He was put on light duty for the remainder of his shift, then returned to normal duties for his next rotation.

[58] At the time of the Accident, the plaintiff was working as a contractor and did not have any coverage to allow him to take time off of work. He continued to work because he was concerned about maintaining his income and not putting financial strain on his family.

[59] The plaintiff's work has become significantly more difficult due to his injuries. During the first year after the Accident, he had to wear ear plugs while driving to work because the travel for work aggravates his tinnitus.

[60] Online video training is nearly impossible because he can hardly hear it. He can no longer rely on his earing to troubleshoot problems with the machinery like he used to. He can no longer rely on his hearing to help ensure his safety, which is particularly stressful while working remotely by himself. He struggles to work in group settings, like his large morning meetings, and around the machines because all of the sounds muddle together, make it difficult to hear, and aggravate the plaintiff's hyperacusis and flares up his tinnitus. The plaintiff often has to ask people to repeat themselves.

[61] The plaintiff prided himself on being a competent person. These newfound difficulties with his job are frustrating and embarrassing for him.

[62] In the two years after the Accident, the plaintiff was no longer confident in his ability to be success in a supervisory position. This loss of confidence caused him to not apply for open supervisory positions during those years.

[63] Despite these difficulties, the plaintiff decided to challenge himself once he had a better understanding of the permanence of his injuries and their effect on his ability to work. About one and a half years ago, the plaintiff successfully applied for a lead operator position with CNRL. This came with an increase in the amount his company can charge for his services of \$5 per hour.

[64] The plaintiff expects that his injuries will make higher paid supervisory roles more difficult for him. He also expects that it will be harder for him to get hired in those roles. In the plaintiff's view his hearing affects his performance in interviews, particularly interviews conducted over the phone or over video call like Webex. For example, he applied for an assistant foreman job and was not selected. In the

Page 13

interview conducted over Webex he couldn't hear people well and that made him "stutter and stagger" when answering questions. He believes his performance in the interview caused him not to get the job, despite being formally advised his location was the deciding factor

[65] In March 2024, the plaintiff hosted his first annual Webex safety meeting. At the meeting, the plaintiff struggled to manage the overlapping noise while hearing everyone trying to speak to him to get instructions. He was struggled to teach and work with his peers and managers, and having to ask people to repeat themselves was stressful. The positions he wants to move into require an increased amount of large meetings and calls, which will be difficult for him with his hearing problems as he experienced in March.

[66] The plaintiff is worried that his managers do not think he can handle more management responsibilities because they could see that he struggled to communicate effectively in the March meeting and that the plaintiff was getting frustrated because of these difficulties.

[67] Prior to the Accident, the plaintiff had no problem with communication or managing his emotions at work. Now, he is not sure if he could handle the frustration that comes with failures to communicate effectively.

[68] The plaintiff's problems with his hearing have a big impact on his decisions regarding his future career path. He is now considering leaving the oil and gas industry for a career that would be easier with his hearing problems, instead of pursuing further promotions within oil and gas. I accept that if he leaves oil and gas to better accommodate his hearing, he will have to take a pay cut if he and his family remain residing in the Fort St. John area.

[69] If he chooses to stay in oil and gas, he is no longer certain if he will be able to get a promotion, or even that he could stick with a job with more responsibility because of the strain on his hearing. His difficult experience with the annual safety meeting this past March highlighted for the plaintiff the problems he will face in a

Page 14

supervisory position because of his hearing. He is worried that, because of his hearing, a supervisory position will make him miserable and the frustration that comes with it will affect the way he interacts with people.

Social and Emotional Impact

[70] The plaintiff describes how he no longer goes out to socialize or see his family as much as he used to because of his hearing problems. He used to love going out to restaurants and getting together with family at least once or twice during his weeks off from work. Going out to restaurants and group events are now frustrating and awkward because he cannot hear what people are saying. When he sees his family now, they usually stay in.

[71] The plaintiff's relationship with his spouse has also been strained because of his hearing. They used to both be quite social but now that it is difficult and less enjoyable for him to go out, they no longer go out much anymore and his spouse will turn down social events as a result of the plaintiff's injuries.

[72] The plaintiff also describes how he can no longer engage in his outdoor hobbies because his hearing problems make it a stressful experience. He has to wear earplugs to mow the lawn or use a power tool, which prevents him from hearing what is going on around him and makes him anxious about safety while he is working. When he tried building a fence last year, he was stressed and constantly looking around to ensure that everyone was safe because he could not hear around him with the earplugs in. These activities are no longer enjoyable.

[73] Listening to music has also changed for the plaintiff as anything too loud will cause pain or aggravate his ears and he can now only listen to music at low volumes for short periods. While he used to enjoy listening to music with his dad, he can no longer appreciate the activity and listening to albums together can flare up the plaintiff's tinnitus.

[74] The plaintiff has also lost the enjoyment he used to get from playing guitar. He can no longer play the guitar by ear and playing triggers his tinnitus. He has barely picked up his guitar since the Accident.

[75] His injuries have negatively impacted his relationship with his daughters. Prior to the Accident, the plaintiff took every opportunity to spend time with his baby daughter Emma. His fear in the aftermath of the Accident was not being able to take care of his little girl. Now, it is difficult for him to be around his daughters and he often needs to tell them "girls, you have to be quieter, that hurts daddy's ears". He is missing out on playing with his daughters because doing so is too loud and painful for his ears. When they are all playing together, he will often have to interrupt their games because he cannot hear them when they try to tell him something. On family road trips, a common occurrence in the rural north, the plaintiff needs to manage his pain by wearing noise cancelling headphones with music at low volumes instead of being able to converse with his wife and daughters.

[76] The plaintiff's hearing also took away from his enjoyment of his wedding on July 29, 2023. There were 150 people at the wedding, and so there were a lot of voices. The noise flared up his tinnitus and he had trouble hearing the minister. Later, he struggled to hear the speeches made by his friends and family at the meal. He describes the experience of his wedding as challenging and exhausting.

[77] The plaintiff describes feeling like he has lost himself because now he often has to ask for help or special treatment. Before the Accident, he saw himself as a competent and healthy person who looked after himself. Normal activities like doing the dishes or cooking cause him to miss parts of conversations with his wife and friends. He misses being able to hang out and socialize normally, not having to worry about how his hearing will affect him in every situation. He experiences breaks in communication, missed conversations, and lots of interruptions because of his hearing. He has lost his confidence in his ability to do what he needs to do.

The plaintiff's spouse

[78] Stephanie Muss is the plaintiff's spouse. They have been in a relationship for 13 years and were married on July 29, 2023. She lived with the plaintiff before and after the Accident. Her evidence describes the many ways that the plaintiff changed after the Accident, and is consistent with the evidence of the plaintiff.

[79] Before the Accident, the plaintiff was the handyman around the house. The plaintiff took care of the yard work, basic home renovations and repairs, and the vehicle maintenance. Other household responsibilities were shared between the two of them. She and the plaintiff enjoyed laughing and listening to music together. They were happy and did not need to worry about their baby daughter being noisy.

[80] She explains that they would go out often and would have date nights 2-3 times a week when the plaintiff was not in the field. They enjoyed socializing with friends, going out for dinner, and going to concerts.

[81] After the Accident, she describes having to care for the plaintiff like tending to another child. Ms. Muss took over all of the household chores, including dishes, vacuuming, cooking, gardening, home maintenance, grocery shopping, driving, vehicle care, and mowing the lawn, because the noise involved with those activities bothered his ears. She continues to perform most of these tasks because the noise bothers the plaintiff. He can occasionally vacuum and mow the lawn while wearing ear protection. The plaintiff can also drive but Ms. Muss handles all of the highway driving because of the noise.

[82] After the Accident, she also had to take on more of the childcare and had to find an alternative caretaker if she had to leave their daughters with the plaintiff for more than half an hour since the children can be loud. Currently, Ms. Muss can leave their daughters alone with the plaintiff for up to two hours.

[83] During the first two to three weeks after the Accident, Ms. Muss estimates that she spent an additional 15-20 hours per week on housekeeping chores as a

result of the plaintiff's injuries. She now estimates that she spends an additional three to five per week on household chores as a result of the plaintiff's injuries.

[84] Ms. Muss deposes that she and the plaintiff have had to make significant adjustments to their home and social lives as a result of the plaintiff's injuries. Her and their daughters have to actively try to not make any noise so as to not trigger the plaintiff's symptoms. They spend most of their time at home now because going out is likely to cause pain for the plaintiff. They rarely socialize with friends and family together anymore because group settings are too loud and the plaintiff will need breaks or will have to leave if his ears are bothering him.

[85] Ms. Muss describes that she is lucky if they can do three date nights out of the house each year. They have seen two or three movies and half of one concert since the Accident, during which she spent her time worried about the plaintiff's pain.

[86] The plaintiff misses out on the fun with his daughters and on watching the majority of their extracurricular activities because the noise hurts his ears. He can only play with their daughters when they are quiet and has to resort to watching live streams of school concerts and dance recitals because he cannot attend in person. Ms. Muss now has to attend the majority of their daughters' extracurricular activities.

[87] She has also taken responsibility for people-related family tasks, such as speaking with their accountant and scheduling appointments, because communication and phone calls are more difficult for the plaintiff. The plaintiff relies on texting and does not call his mother and sister on the phone as much as he used to.

[88] Ms. Muss also describes noticing that the plaintiff can no longer engage with his hobbies, such as listening to music with his father, playing guitar and building projects.

[89] Ms. Muss describes the plaintiff as a person who does not share his feelings or talk about how bad the emotions or injuries are but she observes that he is

suffering. The plaintiff tries to be happy around her and their daughters but will shut down and become grouchy when his ears are bothering them.

[90] She describes noticing that he is more frequently agitated, exhausted and frustrated because he cannot hear and is frustrated with his hearing interfering with his performance at work.

[91] These changes in the plaintiff's emotional state has been confusing for their daughters because they do not understand what is going on and their dad cannot handle them being loud.

[92] The extra costs incurred to address the plaintiff's injuries have also put strain on Ms. Muss and their marriage. She supports the plaintiff travelling to obtain treatment.

Dr. Davin Wilson Chark - Otolaryngologist

[93] I accept that Dr. Chark is qualified as an expert in otolaryngology.

[94] Dr. Chark has provided an expert medical opinion based on his personal medical assessment of the plaintiff as well as review of his medical records. In Dr. Chark's opinion, the plaintiff has chronic bilateral tinnitus, bilateral traumatic hearing loss and hyperacusis.

[95] Dr. Chark notes that the plaintiff's regular hearing screens from 2013 to before the Accident in 2019, all showed normal hearing thresholds in both ears. He then notes that the plaintiff's hearing screens after the Accident in May, June, July and September 2019, all consistently showed high frequency hearing loss in both ears. The plaintiff's hearing test on June 24, 2024, performed at Amplifon in Fort St. John showed moderate hearing loss in both ears at 8000 Hz.173

[96] The plaintiff scored a 74/100 on a Tinnitus Handicap Inventory questionnaire, indicating that he suffers from a severe tinnitus handicap.

[97]

the bear banger exploding in his hand. The plaintiff's two most significant and bothersome symptoms are near constant tinnitus and high frequency sensorineural hearing loss in both ears along with hyperacusis. In testing, Dr. Chark noted that the plaintiff suffers from a severe handicap as a result of his tinnitus.

[98] Dr. Chark identifies the bothersome aspects of the plaintiff's tinnitus reported to him by the plaintiff as follows:

- a) difficulty concentrating;
- b) difficulty hearing people around him;
- c) feeling anger, confusion and desperation;
- d) trouble sleeping;
- e) feeling unable to escape it;
- f) interference with his ability to enjoy social activities;
- g) interference with his household/work responsibilities;
- h) stress on his personal relationships; irritability and frustration;
- difficulty reading or focusing on a task; i)
- i) feeling a lack of control leading to him feeling tired, depressed and anxious; and
- k) feeling insecure and unable to cope.

[99] The plaintiff has not made a significant recovery in his symptoms over the five years since the trauma and the symptoms are likely permanent. There are no known cures for the plaintiff's symptoms and current mainstays of tinnitus management are only aimed to decrease how noticeable or bothersome the tinnitus is over time.

[100] Dr. Chark recommended that the plaintiff continue to use a sound therapy application and hearing protection around loud noises. He also recommended that the plaintiff continue to get yearly hearing tests to monitor for hearing stability.

[101] Dr. Chark also notes that he had recommended that the plaintiff try hearing aids but the plaintiff did not find them helpful. Instead, the plaintiff is using specialty earplugs as needed.

[102] Finally, Dr. Chark provided details of a new tinnitus therapy provided by Lenire, a dual mode tinnitus treatment device approved by the US FDA. This treatment is currently only available in the United States but, in Dr. Chark's experience, there are patients with debilitating tinnitus who are willing to travel to the United States to trial and/or purchase the device and he recommends the plaintiff seek the treatment as it may provide some symptom relief.

The evidence of Earth Management's representative

[103] Mr. Mueller is the President, and sole owner and director of Earth Management.

[104] Mr. Mueller created Earth Management about 25 years ago. Earth Management specializes in distributing bear deterrents, including pyrotechnics (bear bangers), bells, horns and bear spray.

[105] Prior to beginning Earth Management, Mr. Mueller primarily worked in outdoor retail stores. Earth Management began by selling bear spray to outdoor retail stores.

[106] Earth Management occasionally sells to individual customers but primarily focuses on retail accounts. Mr. Mueller handles packing orders with the assistance of a seasonal employee.

[107] Earth Management does not have a quality control system. Earth Management relies on its expectation that "whatever comes into our warehouse [is] the highest quality" and that "everything is exactly the way it is supposed to be from the manufacturer".

Design and Production of Star Blazer Bear Bangers

[108] Earth Management first started selling pyrotechnics in or around 2002. Its first order of bear bangers was from Bulgaria and were called the TruFlare bear bangers.

[109] Mr. Mueller created the brand name Star Blazer for Earth Management's own line of pyrotechnics including bear bangers. He then sought out a manufacturer in China for the bear bangers that he would then label as Star Blazer.

[110] The blueprints for the Star Blazer bear banger were the blueprints that Mr. Mueller received from his previous bear banger supplier in Bulgaria. Earth Management did not have an engineer or expert look at the blueprint for the Star Blazer bear banger. Earth Management relied on the existing blueprint for the TruFlare bear banger because "it had a stamp – a seal on it, so some engineer would have put their stamp to it". Mr. Mueller felt certain that the blueprint would create a safe product because the blueprint looked like it was written by an engineer.

[111] Between 2010 to 2012, Earth Management hired Jiangxi to manufacture Star Blazer bear bangers based on the design in the blueprints provided to Jiangxi by Earth Management.

[112] Earth Management did not conduct any testing of the prototype made by Jiangxi.

[113] Prior to starting the production run, Mr. Mueller visited the Jiangxi factory and looked at the product. Both Mr. Mueller and representatives of Jiangxi fired off some of the product once during that visit. Mr. Mueller believes that Jiangxi conducted further testing of the product but he did not ask for any records of the testing.

[114] In 2015, Earth Management began to receive stock of the Star Blazer bear bangers. After receiving the Star Blazer bear bangers in Canada, the only testing or quality control done by Earth Management was to randomly select cartridges to fire off. They would conduct this random firing to test the products periodically each

year, generally after the winter or after there was an incident with a batch. There are no records of any testing by Earth Management at any time.

[115] Earth Management designed the Star Blazer bear banger box, which included the Star Blazer logo designed by Mr. Mueller, Earth Management's contact information and instructions on how to use the product. Earth Management copied the instructional and safety information on the Star Blazer box from the TruFlare bear banger box purchased from Bulgaria.

[116] Earth Management only manufactured a single "batch" of Star Blazer bear bangers. There were no other distributors selling bear bangers under the brand name Star Blazer.

[117] As president of Earth Management, Mr. Mueller agrees he is responsible for the safe storage of the bear bangers. Only Mr. Mueller and Earth Management employees handle the bear bangers.

[118] Earth Management has no policies or procedures for the safe handling of the bear bangers. There is no specific safety information that Earth Management shares with its employees for their handling. Employees are told not to fire the pyrotechnics against the wall because they are explosives.

[119] The bear bangers were stored in a used sea can located in a field north of Spruce Grove. It was built by Earth Management's carpenter and had a wooden floor, wooden sides, and a wooden roof with steel ends. It was unheated and had no light. During winter, the sea can could not be accessed because there was too much snow surrounding it.

[120] Mr. Mueller had concerns about whether bear bangers stored in freezing weather (in minus 40 degrees Celsius) could still be used. He thought that, since the bear bangers are produced in a warm climate, the manufacturer may not have thought about the potential problems that could arise if they froze.

History of Problems with Star Blazer Bear Bangers

[121] Between April 2016 and October 2017, Mr. Mueller was aware of 12-20 accidents involving the Star Blazer bear banger cartridges. All of these accidents involved premature detonation of the Star Blazer bear banger. These accidents caused burns and one person lost an eye.

[122] Prior to October 2017, Mr. Mueller told Jiangxi that the bear bangers were misfiring. Earth Management "had an idea that the bear bangers were misfiring just above the pen launcher and were not being projected up into the atmosphere the way it was designed to do".

[123] The manufacturer informed Mr. Mueller that they could not identify what was causing the misfiring.

[124] Earth Management then stopped importing pyrotechnics because there were "too many incidents" of "people getting hurt".

Recall

[125] In October 2017, Earth Management stopped selling Star Blazer bear bangers because "too many people [were] getting injured, and its not right".

[126] Mr. Mueller created a customer list of accounts he believed had bought Star Blazer bear bangers in the past couple of years. Mr. Mueller signed a letter dated November 2018, that asked Earth Management's customers to stop selling the Star Blazer bear banger. Mr. Mueller did not send the letter himself. He is not sure if the letter was sent to all the customers on the list of purchasers of the Star Blazer bear banger. Mr. Mueller could only confirm that "some of them got out or they all got out. I don't know. That I don't know." There is no record of who received the letter, if anyone.

[127] After the letter was sent, Mr. Mueller did not contact his customers by email and was unsure if another Earth Management employee did so. Mr. Mueller does not recall contacting his customers by phone and he did not speak with his employee about whether she tried to call any customers.

[128] Even where Earth Management received no response from the customer to the November 2018 letter, Earth Management did not follow up in any way to make sure the letter had been received.

[129] At no point did Earth Management review a list of its less than 80 customers who had purchased the Start Blazer bear banger and confirm that each customer had received the communication that it should take the Star Blazer bear bangers off its shelves. Mr. Mueller did directly contact one of Earth Management's largest customers called FGL. He did this because FGL had a lot of product and Mr. Mueller was concerned that the letter "would have been lost in their operations". Mr. Mueller personally drove to FGL to collect the Star Blazer bear bangers in their inventory, and personally disposed of them himself. He replaced them with TruFlare products. There is no record of this other than email communications with FGL representatives.

[130] The reason Peter Mueller treated his largest customer differently than his other customers is because he wanted to mitigate the biggest exposure to people getting injured. He wanted to speak with someone directly because of the importance of the safety issue. He believed that it was helpful to make a phone call to the store to prevent people from getting injured. He did not try to make the same contact with his other customers.

[131] Earth Management disposed of all the Star Blazer bear bangers stored in their own warehouse by throwing them in a garbage bin.

CMP Sports

[132] CMP Sports was a client of Earth Management beginning at least as early as 2013. CMP Sports purchased Star Blazer bear bangers from Earth Management from 2013 to 2017.

[133] Earth Management did not personally contact CMP Sports by phone or email to inform them about the defective bear bangers. There is no record of Earth Management informing CMP Sports of the direction to stop selling the Star Blazer bear bangers, including by mail.

Assessment of the Evidence

Credibility of the Plaintiff's Evidence

[134] Assessing credibility involves a consideration of a number of factors as set out in *Bradshaw v. Stenner,* 2010 BCSC 1398 at para. 186 (aff'd 2012 BCCA 296):

[186] Credibility involves an assessment of the trustworthiness of a witness' testimony based upon the veracity or sincerity of a witness and the accuracy of the evidence that the witness provides (Raymond v. Bosanguet (Township) (1919), 59 S.C.R. 452, 50 D.L.R. 560 (S.C.C.)). The art of assessment involves examination of various factors such as the ability and opportunity to observe events, the firmness of his memory, the ability to resist the influence of interest to modify his recollection, whether the witness' evidence harmonizes with independent evidence that has been accepted, whether the witness changes his testimony during direct and cross-examination, whether the witness' testimony seems unreasonable, impossible, or unlikely, whether a witness has a motive to lie, and the demeanour of a witness generally (Wallace v. Davis, [1926] 31 O.W.N. 202 (Ont.H.C.); Faryna v. Chorny, [1952] 2 D.L.R. 152 (B.C.C.A.) [Faryna]; R. v. S.(R.D.), [1997] 3 S.C.R. 484 at para.128 (S.C.C.)). Ultimately, the validity of the evidence depends on whether the evidence is consistent with the probabilities affecting the case as a whole and shown to be in existence at the time (Faryna at para. 356).

[135] The affidavit evidence is uncontested by Earth Management. The evidence regarding the bear banger is provided by earth Management itself.

[136] Mr. Muss's evidence and reporting to Dr. Chark is presented in a straight forward and consistent manner without resorting to any obvious exaggeration or evasion. While I accept the caution that accompanies a spouse's testimonial leanings, Ms. Muss's evidence highlights the stoic nature of the plaintiff which comes through in his own words.

[137] Mr. Mueller is likewise forthright in his discovery evidence, making numerous admissions against interest.

[138] I find the evidence of the parties and lay witnesses to be credible and reliable.

Liability

[139] The plaintiff alleges that the Accident was caused by the defendants" negligence.

Jiangxi

[140] The notice of civil claim set out the following facts and legal basis for the plaintiff's claim against Jiangxi:

- a. Jiangxi is a manufacturer of bear bangers, and the manufacturer of the bear banger involved in this accident. Jiangxi is incorporated under the laws of China. It has a place of business at Songshanjiang Vil Guanchao Tow Xiannvhu District Xinyu, 338018 China. Jiangxi was involved in the design, manufacture, inspection, quality control and distribution of the bear banger involved in this accident.
- b. The accident was caused by a defective bear banger cartridge.
- c. Jiangxi designed, manufactured, marketed, distributed and sold the bear banger Jiangxi owed a duty of care to individuals using the bear banger, including the plaintiff.
- d. Jiangxi knew that the bear banger would be used by individuals to try to deter bears. It was reasonably foreseeable that users of the bear banger would be injured if the bear banger detonated in the pen launcher.
- e. Jiangxi is liable for any manufacturing defects in the bear banger, including defects introduced by suppliers.
- f. Jiangxi breached the standard of care it owed to the plaintiff.
 Particulars of these breaches include:
 - failing to ensure that the bear banger cartridge was free of defects;

- ii. failing to ensure that the bear banger cartridge was properly packed, including failing to ensure that the layers combustible and incombustible powder were packed correctly;
- iii. failing to implement an adequate inspection and quality control program to ensure that bear banger cartridges with defects did not enter the stream of commerce;
- iv. using suppliers they knew or ought to have known had inadequate manufacturing and quality control processes;
- v. failing to warn or recall the bear banger cartridges when they knew or ought to have known, as a result of prior failures and accidents, customer complaints, warranty claims, returned products, and high volume of replacement bear banger cartridges that the bear- banger cartridge was defective and prone to failure; and
- vi. failing to warn Mr. Muss of the hazards associated with the bear banger cartridge, including that it would detonate in his hand because it was manufactured defectively.
- g. The accident was caused solely by the negligence of [Earth Management] and Jiangxi.
- h. The defendants are jointly and severally liable for the plaintiff's damages.

[141] The plaintiff has a default judgment against Jiangxi. As such the facts pleaded in the notice of civil claim are deemed to be proven, and Jiangxi is jointly and severally liable for damages incurred by the plaintiff caused by its negligence as the manufacturer of the defective bear banger.

Earth Management

[142] The plaintiff asserts that there are two sources of liability in negligence: (1) Earth Management's negligent recall and (2) Earth Management's negligent distribution of a defective product. [143] As this is a claim in negligence, the plaintiff must demonstrate on a balance of probabilities that:

a) Earth Management owed the plaintiff a duty of care;

- b) Earth Management breached the applicable standard of care; and
- c) Earth Management's breach caused the plaintiff's injuries.

(see for example *Hans v. Volvo Trucks North America Inc.*, 2018 BCCA 410, at para. 17).

[144] Conduct is negligent if it creates an objectively unreasonable risk of harm. To avoid liability, a person must exercise the standard of care that would be expected of an ordinary, reasonable and prudent person in the same circumstances: *Ryan v. Victoria (City),* [1999] 1 SCR 201, at para. 28.

[145] The measure of what conduct is reasonable depends on the facts of the case and includes factors such as the likelihood of a known or foreseeable harm, the gravity of that harm, and the burden or cost which would be incurred to prevent the injury: *Ryan*, at para. 28.

[146] I find that Earth Management's conduct repeatedly fell below the standard of what an ordinary, reasonable and prudent person would do in the same circumstances. Earth Management:

- a) Simply copied a blueprint for an inherently dangerous product without any expertise or inquiry into whether it was safe;
- b) Contracted for that dangerous product to be manufactured without meaningful inquiry into quality control or testing by that manufacturer;
- c) Sold that dangerous product, without conducting any meaningful quality control or testing, including after storage in freezing temperatures; and
- After becoming aware that the product was defective and had caused injury to as many as 20 users, conducted an entirely deficient recall that did not prevent the sale of the product to the plaintiff.

[147] Proof of a defect can rarely be proven by direct evidence. As a result, the existence of a defect at the material time has been held to be provable by inference from circumstantial evidence: *Grant v. Australian Knitting Mills, Ltd.*, [1936] AC 85; *Farro v. Nutone Electrical Ltd.*, [1990] O.J. No. 492 (Ont. CA).

[148] Prior to the Accident, in which the Star Blazer bear banger detonated prematurely, there had been as many as 20 other incidents involving premature detonation of a Star Blazer bear banger. Mr. Mueller believed that the product was defective. He threw out all of Earth Management's remaining inventory of the Star Blazer bear bangers long before the plaintiff purchased the Star Blazer bear banger from CMP.

[149] The plaintiff was a regular and experienced user of bear bangers. He had used them over a hundred times over the course of his career and had never had an issue prior to the Accident. He also had annual training on how to use them safely. There is no evidence that misuse of the product caused it to malfunction.

[150] In light of this evidence, I infer that the failure of the Star Blazer bear banger was caused by a defect either as a result of negligent design or storage.

[151] Earth Management was the designer and distributor of the Star Blazer bear banger. Earth Management also instructed and controlled the manufacturer that produced the product in accordance with the design provided by Earth Management. Earth Management is the only importer and distributor of Star Blazer bear bangers which are sold exclusively under the Earth Management brand. Earth Management was entirely responsible for the creation and distribution of Star Blazer bear bangers. In every way, Earth Management was, and publicly held itself out as, the entity responsible for sales of the Star Blazer bear banger including to the plaintiff.

[152] In such a circumstance, a distributor has the same duties as a manufacturer: *Darlington and Darlington v. Mobrand Sales Ltd. and Motokov Canada Inc.* (1981),
12 Man. R. (2d) 199 (Co. Ct.).

[153] Earth Management owed a duty of care to the plaintiff, who purchased the Star Blazer bear banger from a direct customer of Earth Management.

[154] As set out in *Nicholson et al. v. John Deere Ltd.* et al., 1986 CanLII 2502 (ON SC), when conducting a recall of a dangerous product, a manufacturer or distributor has a duty to implement it in an effective and dependable manner:

At a minimum, however, the manufacturer in this case, assuming that full knowledge, actual or imputed, of the serious potential risk of harm reached him only some years after his product was marketed, had a duty to devise a programme that left nothing to chance. The decal on the tank could not be counted on and neither could the manual. The newspaper advertisements could not be relied upon to reach but a small portion of the potential victims.

[155] The nature and scope of the duty to warn varies with the level of danger entailed by the ordinary use of the product: *Hans*, at para. 34.

[156] This duty to warn applies to distributors and continues after the sale of the product: *Rivtow Marine Ltd. v. Washington Iron Works*, [1974] S.C.R. 1189, at page 1200.

[157] The Court must assess whether Earth Management's actions constituted a fair and reasonable warning in all the circumstances of the case.

[158] In October 2017, Earth Management was aware of 12-20 incidents in which a Star Blazer bear banger had exploded prematurely and injured the user. These injuries included burns and at least one user lost an eye. At this point Earth Management was aware that there was a high level of danger entailed by ordinary use of the product. Mr. Mueller felt that too many people were being injured and that Star Blazer bear bangers were dangerous to users. He decided that a recall was necessary and he halted sales of the product from Earth Management in October 2017.

[159] Mr. Mueller signed a letter dated November 2018, which he intended to be sent to his customers "requesting our customers to stop selling this product if you still have some in your inventory". Mr. Mueller did not send the November 2018 letter, and he does not know who the letter was sent to. There is no record of the November 2018, letter having been sent to any company, other than that Mr. Mueller recalls receiving responses from some customers. However, there is no evidence that the letter was sent to or received by all of Earth Management's customers.

[160] CMP Sports purchased the Star Blazer bear bangers from Earth Management. There is no evidence that Earth Management had any contact with CMP Sports to notify CMP Sports that the Star Blazer bear bangers were defective.

[161] Earth Management had a duty to warn of the defective bear bangers and failed to meet the required standard of care in doing so. This failure to properly recall the defective bear bangers from CMP Sports led to the plaintiff's purchase and use of the recalled bear banger long after the supposed "recall".

[162] As with the distributor in *Rivtow*, Earth Management knew the purpose for which the product was to be used, was aware of its danger when used for that purpose, and owed a duty to advise the plaintiffs accordingly. Earth Management failed to issue a reasonable warning about the defect that became apparent after the sale of the product.

[163] Earth Management's recall program was not dependable. The minimal steps taken were totally disproportionate to the very serious risk of injury to ordinary users of the product. Mr. Mueller took no steps to ensure that CMP Sports had been alerted to the defect. There is no evidence that the November 2018, letter was sent to CMP Sports. Even if it had been sent, that the letter alone could not be relied on was acknowledged by Mr. Mueller. Mr. Mueller took a much more thorough approach to recalling the product from one or two larger customers, acknowledging that the letter might not be received by the appropriate person, and so further communication was what was required to prevent injuries. Mr. Mueller's evidence was that, in his view, it was necessary to follow up with customers to confirm that they had been notified that the product was dangerous, as he did with his largest customer FGL.

[164] Earth Management's recall fails to meet the requisite standard of care. Mr. Mueller acknowledged that it was necessary to inform his customers that the product was dangerous and could cause harm through its regular use. The steps taken by Earth Management were: preparing a single letter, failing to keep track of which customers that letter had been sent to, failing to confirm that the letter was received by any specific customer, and providing notice of the recall by phone or email to only one or two customers. Mr. Mueller testified that there were only approximately 70 or 80 customers affected by the recall. A reasonable person would have, at a minimum, phoned or emailed each of those customers (at least those who never responded to the letter) to confirm that they received the letter and were aware that the product was dangerous to users and should not be sold.

[165] Earth Management's negligence led to the plaintiff's purchase of a defective bear banger years after Earth Management was aware of the defect. This failure to warn caused the plaintiff's injuries. Had CMP Sports known of the defect, they would have removed the defective product from their shelves. As an experienced user of bear bangers and a person concerned with the safety of using them, I find that had the plaintiff known of the risk that the bear banger would explode before launching, he would not have purchased and used it.

[166] Earth Management is liable to the plaintiff because but for the negligence of Earth Management in failing to adequately recall the defective product, the Accident would not have happened.

[167] Earth Management was also negligent for their sale of a defective product. The defect was caused by either Earth Management's negligent design or its negligent storage of the product.

[168] The plaintiff does not need to specify exactly what was done wrong; they need only show on a preponderance of probability on the evidence as a whole that the defendant was responsible for the defect, which can be done by excluding the probability of some other person having created the hazard: *Smith v. Inglis*, [1978] N.S.J. No. 495.

[169] With respect to the design and manufacture of the bear bangers, Earth Management was negligent in the following ways:

- a) Earth Management failed to take reasonable care in ensuring the accuracy, effectiveness or suitability of the blueprint design that it provided to the manufacturer. Mr. Mueller copied the blueprint for the design of the bear banger from a Bulgarian competitor, but did not have the blueprint checked by an engineer or an expert. Mr. Mueller made it clear that he himself is not an engineer and does not understand the inner workings of a bear banger but stated that he did not need to have the blueprint reviewed because it looked like it was professionally done.
- b) Earth Management failed to adequately test and check the quality of the bear bangers. The only testing conducted of the bear bangers was conducted through sporadic random detonation conducted by Mr. Mueller. There are no records of these tests. There was no system in place for quality control.
- c) Earth Management did not have sufficient controls or systems in place to ensure that this dangerous product was safe for use.
- d) Earth Management's storage of the bear bangers in an unheated sea can was negligent. The sea can was kept outdoors and in the winter it was made inaccessible by the layers of snow. Mr. Mueller was not sure whether the bear bangers were still functional after being frozen in storage. However, Earth Management did not conduct any systematic testing or quality control of previously frozen bear bangers.

[170] Whether the defect originated in the design or storage of the bear banger, Earth Management was responsible for the defect. Earth Management's conduct in the design and storage of the product was below the standard of care because they did not include the basic safety measures required to ensure production of a safe product. [171] Based on the foregoing, I find that the Accident would not have happened but for the negligence of Earth Management.

[172] Taken together, Earth Management is liable to the plaintiff for sale of the defective and dangerous product.

<u>Damages</u>

Non-Pecuniary Damages

[173] *Stapley v. Hejslet*, 2006 BCCA 34 outlines the purpose of and considerations for assessing non-pecuniary damages. At para. 46 the Court of Appeal sets out an "inexhaustive list of common factors" to be considered, being the:

- (a) age of the plaintiff;
- (b) nature of the injury;
- (c) severity and duration of pain;
- (d) disability;
- (e) emotional suffering; and
- (f) loss or impairment of life;
- ...
- (g) impairment of family, marital and social relationships;
- (h) impairment of physical and mental abilities;
- (i) loss of lifestyle; and
- (j) the plaintiff's stoicism (as a factor that should not, generally speaking, penalize the plaintiff ...).

Pain, Suffering, Loss of Enjoyment and Loss of Amenities

[174] The plaintiff was 32 years old when he was injured. He was becoming established in his career and had just started to grow his family with Ms. Muss.

[175] His injuries are permanent and he will spend the remainder of his life living with them.

[176] The plaintiff's chronic bilateral tinnitus, hyperacusis and bilateral traumatic hearing loss will be present for the rest of his life, worsening as he ages. The symptoms he experiences are likely permanent with no known cure. Current mainstay tinnitus treatments are only aimed to decrease the bothersome symptoms. He may be able to get relief through a treatment only available in the US but this is a new treatment that has only recently been approved by the FDA.

[177] The plaintiff experiences daily pain due to his injuries to his ears and will likely experience this pain for the rest of his life. There is a constant low ringing in his ears due to the tinnitus. The severity of the pain and ringing varies each day and will increase if the plaintiff is exposed to loud or extended noise or gets too tired. His employment increases the pain he experiences, as do regular household activities and being around his children.

[178] The plaintiff has also developed psoriasis in his ears because of how often he needs to wear earplugs. This will continue for the duration of his life.

[179] The plaintiff's hearing loss will continue to worsen as he ages and he will struggle to hear those around him for the rest of his life. Hearing aids make his symptoms worse and make it more difficult to hear, so those will not be available to him to improve his hearing.

[180] The plaintiff also suffered temporary pain as set out above.

[181] The plaintiff can no longer perform his work duties as he did before. He struggles to work in group settings, completing online video training is nearly impossible for him because he cannot hear the video, he can no longer troubleshoot problems with machinery using his hearing, and he can no longer rely on his hearing to be aware of his surroundings in dangerous environments.

[182] The plaintiff has also struggled with his new work duties, particularly dealing with team calls and leading meetings over Webex because he struggles to hear all of the different voices. He also struggled in a Webex interview because he could not hear the interviewers well.

[183] The plaintiff can also no longer perform many of the household duties he was responsible for. He cannot be left alone with his children for longer than 2 hours at a

time. Household chores are largely performed by his wife, including dishes, vacuuming, cooking, gardening, home maintenance, grocery shopping, driving, vehicle care, and mowing the lawn, because the noise involved with those activities bothered his ears.

[184] When he does try to engage in an activity that could hurt his ears, he has to wear ear protection.

[185] Being a competent and healthy person who took care of himself and could get things done easily formed part of the plaintiff's identity. Since the Accident, he has struggled with asking for help or accommodations due to his injuries. His spouse observes he is now grouchy and shuts down when his ears are bothering him. He is not as happy since the Accident.

[186] He is frustrated and embarrassment at work and in his daily life now. He is stressed and concerned that his hearing is affecting the way he treats people around him. He is now more irritable and reclusive because socializing causes him pain and embarrassment, particularly when he has to ask people to repeat themselves.

[187] On a day which should have been one of the most joyful days of his life he suffered during his wedding due to his injuries.

[188] His relationship with his children has suffered, and he is not able to enjoy as much time with them as he would otherwise have been able.

[189] For the Muss family, "life at home is not what it used to be".

[190] I find that the plaintiff's life has been significantly negatively altered by the daily pain he experiences as a result of his hearing problems. Every facet of his life has been affected, especially his relationship with his family.

[191] At this time, it is unlikely that the plaintiff's pain will improve or that his life will return to how it was before the Accident. I find it is likely that the plaintiff's hearing problems will get worse over time as he ages.

[192] The plaintiff refers me to non-pecuniary present value awards of \$62,600 to \$129,970 to assist in assessing this head of damage for the plaintiff. I agree with the plaintiff that the most helpful comparator decision are *MacKay v. Jhulley*, 2015 BCSC 1114 and *Dai v. Grose*, 2023 BCSC 717, which fall in the middle of that range.

[193] In *McKay*, a 39-year-old plaintiff was injured in an assault. He suffered headaches, dizziness, tinnitus and hyperacusis. He had constant ringing in his ears and minimum exertion triggered headaches, dizziness and fatigue. His injuries interfered with his sleep and he had a much reduced tolerance to noise. His injuries were permanent and would be exacerbated with age. He was in the prime of his life prior to the injury. After the injury, his ability to function at work and at home was severely impaired. His relationship with his wife and family was significantly changed, he could no longer engage with his hobbies or take his children to the park, and he became reclusive. The court found that he experienced substantial loss of enjoyment of life and awarded him \$96,926 (in 2024 dollars).

[194] *McKay* is the most similar to the plaintiff's circumstances in terms of the effect that his injuries had on his enjoyment of life. The plaintiff in *McKay* was close to the same age as Mr. Muss and suffered from both tinnitus and hyperacusis. Like the plaintiff in *MacKay*, Mr. Muss was healthy with no prior health problems and then suffered permanent injuries that will be exacerbated with age. While the court in McKay focuses on the plaintiff's dizziness and headaches, the similarities between their loss of enjoyment of life are strong. The plaintiff has also experienced a significant change in his relationships with his family, wife and daughters, he can no longer play with them in the same way, his wife has had to step in and take responsibility for most of the childcare and household chores, and he has had to become more reclusive, despite previously being a very social person. As in *McKay*, Mr. Muss has also lost the ability to engage with the activities he enjoys, like outdoor work and guitar.

[195] In *Dai*, a 58-year-old plaintiff was injured in a motor vehicle accident. He suffered temporary pain and permanent tinnitus and hyperacusis. He also suffered from post- concussive symptoms consistent with a mild traumatic brain injury. The tinnitus caused ongoing sleep disturbance and fatigue. The plaintiff's fatigue negatively effected his relationships and ability to engage in hobbies. The injuries had a material impact on his enjoyment and productivity at work. The plaintiff was a stoic character and continued to work longer hours despite his injuries. The court accepted that the low end award for these types of injuries (soft tissue injuries that had resolved paired with ongoing tinnitus and hearing loss) was \$78,589 (in 2024 dollars) and the high end was \$179,674 (in 2024 dollars). The court found that Mr. Dai's injuries were slightly less severe than those at the highest end of the range. The plaintiff was awarded \$114,317 (in 2024 dollars).

[196] Similarly, to the plaintiff in *Dai*, the plaintiff also suffers permanent tinnitus and hyperacusis that were initially accompanied by temporary physical injuries. The plaintiff's physical injuries resolved faster than Mr. Dai's, and he has not experienced concussion symptoms. Like the plaintiff, the plaintiff in *Dai* was stoic and continued to work despite the impairment caused by the injuries. The *Dai* plaintiff similarly lost the ability to engage with his hobbies and his injuries have impacted his relationship with his wife and his social life. An additional important factor not present in *Dai* is that the plaintiff here is a father and his injuries have affected his relationship with his daughters. The plaintiff is also younger than the plaintiff in *Dai* and will have to spend longer living with this permanent condition.

[197] In the circumstances, I find that an appropriate award for non-pecuniary damages for the plaintiff is \$95,000.

Future Loss of Earning Capacity

[198] A loss of earning capacity may be quantified either on an earnings approach or a capital asset approach. The earnings approach may be more useful when the loss is more easily measurable, while the capital asset approach will be more useful when the loss is not easily measurable: *Perren v. Lalari*, 2010 BCCA 140 at para. 32.

[199] Claims of loss of earning capacity have recently been addressed in the "Grauer Trilogy" of decisions: *Dornan v. Silva*, 2021 BCCA 228; *Rab v. Prescott*, 2021 BCCA 345; and *Lo v. Vos*, 2021 BCCA 421.

[200] In *Rab*, the Court set out the three-step process for assessing loss of earning capacity:

[47] From these cases, a three-step process emerges for considering claims for loss of future earning capacity, particularly where the evidence indicates no loss of income at the time of trial. The first is evidentiary: whether the evidence discloses a *potential* future event that could lead to a loss of capacity (e.g., chronic injury, future surgery or risk of arthritis, giving rise to the sort of considerations discussed in *Brown*). The second is whether, on the evidence, there is a real and substantial possibility that the future event in question will cause a pecuniary loss. If such a real and substantial possibility exists, the third step is to assess the value of that possible future loss, which step must include assessing the relative likelihood of the possibility occurring-see the discussion in *Dornan* at paras 93-95.

[201] Future income loss is properly considered on the basis of loss of income earning capacity: *Ibbitson v. Cooper,* 2012 BCCA 249, at para. 19.

[202] Given the plaintiff's prolonged full-time employment history prior to and after the Accident, his loss of earning capacity is best assessed using an earnings approach.

Has the plaintiff's earning capacity been impaired?

[203] The plaintiff's income has not changed since the Accident, and he continues to earn \$72,000 per year. In 2020, he became a contractor to his former employer. Despite a five dollar increase in the hourly rate the company is paid as a contractor, the plaintiff's salary has remained the same. His financial information indicates he is not hiding income in retained earnings or claiming any inappropriate business expenses.

[204] At the time of the Accident, the plaintiff had 11 years of experience in the oil and gas industry and expected that he would progress to the role of assistant foreman in 3-5 years, or 2024 at the latest. Given his long work history and proven ambition, I accept there was a strong possibility of such a progression.

[205] An Assistant Foreman earns a yearly salary of \$100,000 plus stock options, full medical and dental benefits, a health spending account, and an annual bonus of 7% or more.

[206] The plaintiff delayed applying for open supervisory positions for two years because of his injuries.

[207] I accept that at least one reason the plaintiff was not successful in his recent application for a position as an Assistant Foreman was due to his poor performance in the interview caused by his hearing problems.

[208] I find that the plaintiff's future earning capacity has been meaningfully impaired because his injuries are permanent and his injuries have caused the following impairments:

- a) His ability to communicate in group settings and around machinery has declined;
- b) His ability to conduct conversations via telephone has declined;
- c) His ability to communicate in person or on the phone is reduced;
- d) He can no longer use his hearing to troubleshoot problems with machinery;
- e) He finds working remotely more stressful now because he cannot rely on his hearing to help him be aware of his surroundings;
- f) His failure to hear communications clearly causes him frustration and embarrassment;
- g) Leadership positions in the oil and gas industry require an increased amount of interpersonal communications, which is the part of his

employment that the plaintiff finds is most negatively affected by his injuries;

- h) His performance in job interviews is negatively affected by his injuries; and
- i) He finds his limitations at work very frustrating, and when he is frustrated his "performance is worse".

[209] The plaintiff expresses a reasonable amount of uncertainty due to his injuries as to whether he can continue in the oil and gas industry. I accept that changing to another industry in his location will require him to take a pay cut.

Quantifying Future Income Loss

[210] The second prong of the income loss test involves determining, and on a present value basis, the amount for future losses. Broadly speaking, there are two methods of assessing income loss: the "earnings" approach or the "capital asset approach". The earnings approach is considered more apt where the loss is more easily measurable, and the capital asset approach is more useful when the loss is not, such as where an injured plaintiff has returned to employment but may experience loss in the future or are now less marketable to future employers": *Meckic v. Cha*n, 2022 BCSC 182, at para. 145.

[211] In the plaintiff's circumstances, the "earnings approach" is the most useful method of quantifying his losses and involves an assessment of the difference between what hen would have earned with what he can earn now.

[212] The main questions that need to be answered to perform this assessment are:

- a) What would the plaintiff's earnings have been had it not been for the accident?
- b) What will his earnings be in the future?

[213] These questions are to be answered as hypothetical possibilities rather than questions of fact. The standard that the Court must apply then is not a balance of

probabilities, but whether the possibilities are "real and substantial possibilities and not mere speculation". If they are real and substantial possibilities they are given weight according to their relative likelihood: *Meckic*, at paras 109-112.

[214] I find that there is a real and substantial possibility that but for the Accident the plaintiff would have been hired as an Assistant Foreman in 2024 at the latest. His income would have then increased to \$100,000 in 2025 at the latest. This amount would be supplemented with additional benefits and bonuses. Given the plaintiff's work ethic, healthy lifestyle, and family responsibilities, there is a real and substantial possibility that he would have continued to work until 65.

[215] However, the plaintiff's injuries have prevented and will continue to prevent him from being hired as Assistant Foreman, and his yearly earnings in the future will likely continue to be at his current level \$72,000 until he retires.

[216] While there are negative contingencies affecting the plaintiff's real world earnings path as well as his without accident path including risk of unemployment due to layoff or premature death, there are also real contingencies which would increase the earnings level including additional benefits and bonuses or insurance and disability benefits in the case of layoff or other injury.

[217] Considering these factors, I find there is a real and substantial possibility that the plaintiff would have earned \$28,000 more per year for 27 years, from 2025, when he will be 38, to 2052, when he will be 65. Applying a discount rate of 1.5%, the present value of this loss is \$622,000.

Special damages

[218] In *Redl v. Sellin,* 2013 BCSC 581, at para. 55, the Court set out the following with respect to claims for special damages:

Generally speaking, claims for special damages are subject only to the standard of reasonableness. However, as with claims for the cost of future care (see *Juraski v. Beek*, 2011 BCSC 982; *Milina v. Bartsch (1985)*, 49 BCLR (2d) 33 (BCSC)), when a claimed expense has been incurred in relation to treatment aimed at promotion of a plaintiffs physical or mental well-

being, evidence of the medical justification for the expense is a factor in determining reasonableness...

[219] For the plaintiff, there are two sources of past expenses: those incurred by WorkSafeBC and those incurred directly by the plaintiff.

[220] As a consequence of WorkSafeBC paying compensation to the plaintiff, this action was subrogated to WorkSafeBC pursuant to s. 130 of the *Workers Compensation Act*, RSBC 2019, c 1 (the "*Act*"). Section 133 of the *Act* provides that an award for damages is to include health care provided under Part 4 of the *Act*.

[221] As of October 16, 2024, WorkSafeBC has paid \$2,211.86 in health care costs for the plaintiff.

[222] The plaintiff provided evidence which I accept of his own out of pocket expenses which support a claim for recovery. These total \$7,000.00

[223] The past care costs recoverable in this action are therefore \$9,211.86.

Cost of Future Care

[224] The test for establishing a claim for cost of future care is set out in *Milina v. Bartsch*, [1985] B.C.J. No. 2762 (S.C.). There must be a medical justification for claims for cost of future care and the claims must be reasonable: *Milina* at para. 199.

[225] If the evidence shows that the plaintiff is unlikely to use the services recommended, awards for those services should not be made: *Izony v. Weidlich*, 2006 BCSC 1315, at para. 74.

[226] Dr. Chark's opinion is that the plaintiff's symptoms are likely permanent. However, there are a number of tinnitus management options which aim to reduce the negative impact of the associated symptoms.

[227] Dr. Chark recommends yearly hearing tests. These tests cost \$65. As long as the plaintiff is employed in his current field his employers will cover those costs. Given this fact, and the likelihood of continued employment, but also considering the possibility of unemployment not due to premature death, I will assess 10% as an

appropriate cost. The present value of the cost of hearing tests once a year until The plaintiff is 65 is \$1,208 using a discount rate of 2%. 10% of that is \$121 approximately.

[228] Dr. Chark recommends that the plaintiff continue to use a tinnitus treatment application on his phone. The plaintiff's evidence is that he does use such an app, and that this treatment program is free.

[229] Hearing protection is recommended by Dr. Chark. The plaintiff uses special earplugs called DB Blockers. These are dual tone earplugs which muffle louder tones and allow him to hear voices. The cost for these earplugs including associated travel was \$809.00 The plaintiff intends to continue to purchase these earplugs in the future. A reasonable rate of replacement of these earplugs is five times before he retires at 65, the present value of the future cost of earplugs is \$3,965.

[230] Dr. Chark also recommends a new technology in tinnitus management called Lenire. The Lenire treatment will require at least one trip to the clinic in Seattle to get fitted for the Lenire device with some additional follow-up appointments. The Lenire device costs approximately \$6,623. Including reasonable travel costs, this one time expense I assess at \$13,000.

[231] I therefore asses the total cost of future care for the plaintiff at \$17,086.

Past and future cost of Housekeeping

[232] A damage award to the plaintiff to recognize a loss of or diminished capacity to take care of his household may be made under any of the five heads of damages including cost of future care: *Kroeker v. Jansen*, 1995 CanLII 761 (BC CA).

[233] Where a plaintiff suffers an injury, which would make a reasonable person in the plaintiff's circumstances unable to perform usual and necessary household work, that loss may be compensated by a pecuniary damages award: *Kim v. Lin*, 2018 BCCA 77, at paras. 33 and 34.

[234] Ms. Muss spent up to 20 hours each week attending to housekeeping and providing assistance to the plaintiff that she would not have provided if not for the Accident. During the time immediately after the Accident Ms. Muss took over the cooking, cleaning, yard maintenance and childcare that the plaintiff would have otherwise performed. Based on a conservative rate of \$20 per hour, I assess past loss of housekeeping capacity at \$900.

[235] Prior to the Accident, the plaintiff contributed to chores around the household that he is now unable to perform, including childcare, dishes, cooking, gardening, home maintenance, grocery shopping, driving, vehicle care. Ms. Muss has now taken over these tasks completely. She spends an extra three to five hours per week during the two weeks a month he is living at home performing housekeeping chores that the plaintiff would have performed before the Accident but is no longer capable of.

[236] Averaging four hours a week, for 26 week a year I assess the present value of this amount at \$40,979 for loss of capacity of future housekeeping.

[237] Together they total \$41,879.00.

Punitive Damages

[238] The plaintiff seeks punitive damages against Earth Management.

[239] The principles applicable to awards for punitive damages as set out in *Whiten v. Pilot Insurance Co.*, 2002 SCC 18 at paras. 67-76 and *Bowen Contracting Ltd. v. B.C. Log Spill Recovery Co-operative Association*, 2009 BCCA 457 at para. 23 may be summarised as follows:

- a. Punitive damages are not limited to particular "categories" of wrongs, although by their nature they will "largely be restricted to intentional torts";
- b. The general objectives of punitive damages are punishment, deterrence of the wrongdoer and others, and denunciation;
- c. Since the primary vehicle of punishment is criminal law, punitive damages should be resorted to only in "exceptional cases and with restraint"; ...

- d. In setting punitive damages, the court should ask itself "in particular" how an award would further one or other of the objectives of the law and what is the lowest award that would serve the purpose;
- e. It is "rational" to use punitive damages to relieve a wrongdoer of its profits where compensatory damages would amount to "nothing more than a licence fee to earn greater profits through outrageous disregard of the legal or equitable rights of others."
- f. A "formulaic" approach should be avoided. The court should focus not on the plaintiff's loss but on the defendant's misconduct;
- g. The overall award should be rationally related to the objectives for which punitive damages are awarded;
 ...
- h. Punitive damages are not "at large" and an appellate court may intervene if an award exceeds the outer boundaries of a rational and measured response to the facts of the case.

[240] In addition, punitive damages are considered only after the remainder of the damages award has been determined because if the other components are sufficient to meet the objectives of punitive damages, there is no need for a further award: *Morrow v. Outerbridge*, 2009 BCSC 433 at para. 300.

[241] As set out above, beginning in 2017, Earth Management was aware that the Star Blazer bear banger had injured as many as 20 people. At least some of the civil claims resulting from those incidents were resolved by Earth Management's insurer.

[242] Mr. Mueller confirmed that when Earth Management sought insurance for 2019, it was not able to find an insurer who would issue a policy for liability insurance". The 2019 insurance policy that was provided to the plaintiff by Earth Management's insurance broker indicates a "Specific Product Exclusion – Excluding 'Star Blazer Bear Bangers – Centre Fire (box of 6)'".

[243] In 2018, Mr. Mueller became aware that Earth Management would no longer be insured for liability arising from the Star Blazer bear banger, a product that was known to be defective and dangerous. At that stage Earth Management had not spoken to most of Earth Management's retail customers regarding the recall. Mr. Mueller felt it was too much of an inconvenience to him to attempt to contact his customers by phone. The lapse of Earth Management's insurance gave rise to an additional responsibility to ensure that the recall had been or was now effective. Taking no additional steps at the time of the lapse of the insurance coverage is an additional failing of Earth Management that warrants punitive damages.

[244] The duty to warn of a defect is an ongoing duty: *Hans,* at para. 334. The significant change in circumstances arising from lack of insurance should have triggered Earth Management to take further steps to ensure no more people would be injured by the Star Blazer bear banger. I find this to be "a marked departure from ordinary standards of decent behaviour": *Whiten* at para.36.

[245] The additional failure to take any steps in 2018, compounded Earth Management's existing disregard for the plaintiff's well being and warrants an award of punitive damages of \$10,000.

Conclusion

[246] In summary, I make the following orders for awards in accordance with the reasons above:

Non-pecuniary damages	\$95,000.00
Future loss of earning capacity	\$622,000.00
Cost of future care	\$17,086.00
Past and future housekeeping capacity	\$41,879.00
Special damages	\$9,211.86
Punitive damages (Earth Management)	\$10,000.00
Total	\$795,176.86

[247] The defendants are jointly and severally liable for the damages except the award of punitive damages. Punitive damages are awarded only against the defendant Earth Management.

<u>Costs</u>

[248] The plaintiff is entitled to his costs of the proceeding at Scale B.

"Wilkinson J."