**IN THE WORKERS' COMPENSATION COURT OF THE STATE OF MONTANA**

**2008 MTWCC 36**

**WCC No. 2006-1531**

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**ALAN RUSSELL**

**Petitioner**

**vs.**

**WATKINS & SHEPARD TRUCKING COMPANY, INCORPORATED**

**Respondent/Self-Insured Employer.**

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FINDINGS OF FACT, CONCLUSIONS OF LAW AND JUDGMENT

***Appealed to the Montana Supreme Court July 18, 2008***

**Summary:** Petitioner alleges that several of his health ailments were caused by chronic low-level carbon monoxide exposure which occurred while driving a semi-truck for Respondent. Respondent responds that Petitioner has failed to prove that his health problems were caused by chronic low-level carbon monoxide exposure and has failed to prove that he was exposed to an elevated level of carbon monoxide while driving for Respondent.

**Held:** Petitioner has met his burden of proof regarding his diagnosed cognitive dysfunction condition and his claim regarding his cognitive dysfunction is compensable. Regarding his other health ailments, Petitioner has not proven that it is more probable than not that they were caused by his carbon monoxide exposure and his claim for compensation regarding the remaining conditions is denied.

¶ 1 The trial in this matter was held on February 12, 2007, in Helena, Montana. Petitioner Alan Russell was present and represented by James G. Edmiston. Respondent was represented by Leo S. Ward.

¶ 2 Exhibits: Exhibits 1 through 38 and 40 through 49 were admitted without objection. Exhibit 39 was withdrawn by Respondent.

¶ 3 Witnesses and Depositions: The depositions of Petitioner, Dr. Stuart Z. Lanson, Kerry Stutzman, Dr. Edward Hurley Charles, Dr. John Francis Foley, and Dr. Lindell K. Weaver were submitted to the Court and can be considered part of the record. Petitioner,

Bill Hall, Dr. Emil J. Bardana, Jr., Kelly Ann Russell, and Dr. Brent T. Burton (via telephone) were sworn and testified at trial.

¶ 4 Issue Presented: The Pre-Trial Order sets forth the following issues:

> ¶ 4a Whether Respondent is liable for Petitioner's occupational disease claim and for paying occupational disease medical benefits and indemnity benefits.
>
> ¶ 4b Whether Petitioner is entitled to an award of attorney fees and costs pursuant to §§39-71-611/612, MCA (2001).
>
> ¶ 4c Whether Petitioner is entitled to an award of the 20% penalty pursuant to §39-71-2907, MCA.

## FINDINGS OF FACT

¶ 5 On and before October 24, 2002, Petitioner was employed by Respondent as an over-the-road semi-truck driver.[1]

¶ 6 Respondent is a self-insured employer enrolled under Compensation Plan I of the Montana Workers' Compensation Act.[2]

¶ 7 Respondent has denied liability for Petitioner's occupational disease claim of October 24, 2002.[3]

¶ 8 At the time of trial, Petitioner lived in Mesa, Arizona.[4]

¶ 9 In 1986, Petitioner was treated for non-Hodgkin's lymphoma. He received radiation treatment and his lymphoma went into remission. However, his thyroid was damaged from the treatment and he was prescribed medication to correct it. Periodically, he experienced symptoms such as excessive sweating or a sluggish feeling and he would return to his doctor to have his dosage adjusted. Adjusting his medication would cause the symptoms to clear up in a few days.[5]

¶ 10 Respondent's general practice was to assign new drivers older trucks and when the

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[1] Pre-Trial Order at 1.

[2] *Id.*

[3] Pre-Trial Order at 2.

[4] Trial Test.

[5] Trial Test.

driver established a good record, the driver would get a newer truck. Petitioner had not driven for Respondent very long when he was assigned the truck at issue in the present case. He believes he drove it for between six months and a year. Petitioner began to smell exhaust in the truck cab soon after he began to drive it, and the exhaust smell would get stronger, rather than dissipating, if he turned on the fan.[6]

¶ 11 Petitioner's truck had a sleeper cab. When he was on the road he would usually sleep in the cab, only leaving the truck to use the restroom and to eat. He would often be on the road for weeks at a time and would spend upwards of 19 hours per day inside the truck. If the weather required it, Petitioner would leave the truck running to provide heat or air conditioning while he rested.[7]

¶ 12 Petitioner periodically reported a strong exhaust smell in the cab to Respondent. Petitioner recalls that the truck was examined and repaired at least eight times. Whenever Petitioner noticed the smell, he would contact Respondent, and Respondent would reroute his travel so he could stop at one of Respondent's repair shops. It would sometimes take a week or two of driving until he reached one of Respondent's repair shops. Petitioner did not record these repairs in his log, and the only repair records Respondent has located for Petitioner's truck are from October 2002.[8]

¶ 13 Petitioner explained that the exhaust system of a semi-truck has several components made of different materials, and as the truck heats and cools, those materials expand and contract at different rates. Exhaust leaks develop as a normal part of this process, and all semi-trucks develop some exhaust leaks.[9] Each time Petitioner took the truck in for repair, Respondent's personnel would examine the truck, locate leaks, make repairs, and return the truck to Petitioner. Petitioner explained that, in hindsight, he realizes that whenever he had a few days off from driving, he would feel better. In nice weather, Petitioner would have the windows down instead of using the heat or air-conditioner, and at those times, he also did not notice an exhaust smell in the cab.[10]

¶ 14 Petitioner reported feeling sick while driving the truck to Respondent's health and safety staff on multiple occasions.[11] However, he never sought medical treatment and did

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[6] Trial Test.

[7] Trial Test.

[8] Trial Test.

[9] Petitioner Dep. 28:18 - 29:7.

[10] Trial Test.

[11] Petitioner Dep. 30:8-17.

not report feeling sick from exhaust to his Billings doctor when he went in for a physical.[12] Petitioner believes he informed his doctor that he was experiencing fatigue, sore hands

and feet, and numbness in his feet, but he did not connect these problems to driving the truck.[13]

¶ 15 At some point, Petitioner began to experience intermittent numbness in his toes. Petitioner also had headaches, but he considered headaches to be a normal part of driving a truck, so he did not attribute them to the exhaust smell. At around the same time, he began to develop aching in his hands and he thought he was beginning to develop arthritis.[14]

¶ 16 Petitioner had previously noted problems with his hands and feet. On September 22, 2000, Petitioner visited Dr. Brian Fullerton for a complete physical examination. Dr. Fullerton reported that Petitioner was experiencing pain and stiffness in his hands and pain in his feet.[15] At a previous appointment on August 11, 2000, Petitioner had also complained about fatigue.[16]

¶ 17 Petitioner saw Dr. Fullerton on June 28, 2002. He was having digestive problems and felt run down and fatigued. Petitioner also complained of shortness of breath on exertion.[17] Dr. Fullerton planned to follow up with a chest x-ray and additional tests to determine if Petitioner might have damage from the radiation treatments he received for non-Hodgkin's lymphoma. Dr. Fullerton noted that if the tests came back normal, he would order a treadmill test to rule out ischemia.[18] It is unclear if this testing was ever completed. However, ischemia was ruled out by an evaluation at the Utah Heart Clinic on October 31, 2003.[19]

¶ 18 In October 2002, Petitioner was driving what would become his last trip for Respondent. Petitioner became very ill while driving through southern California. He

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[12] Petitioner Dep. 32:1-23.

[13] Petitioner Dep. 33:14 - 34:2.

[14] Trial Test.

[15] Ex. 3 to Weaver Dep. at 145.

[16] Ex. 3 to Weaver Dep. at 147.

[17] Ex. 35 at 9.

[18] Ex. 35 at 10.

[19] Ex. 27 at 5.

called Respondent and stated that he was getting sick from exhaust fumes and that he wanted to take the truck to a facility for immediate repairs. Respondent refused to authorize the stop, and told Petitioner to take the truck to Respondent's repair facility in Missoula.[20]

¶ 19 In Missoula, a senior mechanic whom Petitioner knew as "Bill" worked on the truck. According to Petitioner's log book, he was off for about a week while the truck was repaired. "Bill" returned the truck to Petitioner, and he was assigned to deliver cargo to Phoenix, Arizona.[21]

¶ 20 Billy Dean Hall was a lead mechanic for Respondent and worked for Respondent in Missoula for over 19 years. Hall has no independent recollection of working on Petitioner's truck, but according to the work order, Hall is the mechanic who worked on the truck and performed an annual inspection and a visual inspection.[22] Based on his demeanor and testimony at trial, I find Hall to be a credible witness.

¶ 21 Hall explained that Respondent's main office is located in Missoula, and all the company's repair records from its satellite terminals are stored there. The older records are paper files and the newer records are computerized. The truck Petitioner drove in 2002 has since been sold and all the paper records went with the truck, so the only records Respondent still has for that particular truck are the more recent computerized records.[23]

¶ 22 During the inspection and repair at issue, Hall found an exhaust leak at the front band clamp and he replaced that clamp plus a flex pipe and two more clamps. When making this type of repair, Hall would usually put high temperature silicone around the ends to seal them.[24]

¶ 23 Hall stated that if a truck had an exhaust leak, exhaust could get into the cab while the truck was idling, but probably not at any other time. The exhaust leak he found was on the right-hand side of the truck, about 18 to 20 inches below the cab. The air intake for the heater and air-conditioner is located near the windshield on the right-hand side, so exhaust fumes would come in through the heater and air-conditioner if either was on. Hall testified that if the fan was on, more fumes would enter the cab.[25]

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[20] Trial Test.

[21] Trial Test.

[22] Trial Test.

[23] Trial Test.

[24] Trial Test.

[25] Trial Test.

¶ 24 Hall further testified that according to the computer records, he replaced another clamp 15 days later. Hall believes that when he replaced clamps on this truck, it fixed the exhaust leak problems. He said that exhaust leaks were not out of the ordinary for this type of truck. Although Respondent put carbon monoxide sensors in one particular type of truck which had constant exhaust-leak problems, it did not put carbon monoxide sensors in the type of truck which Petitioner drove.[26]

¶ 25 After receiving the truck from Respondent's repair shop in October 2002, Petitioner began to smell exhaust in the cab only a few miles outside of Missoula. He decided to continue driving. By the time he got to Pocatello, Idaho, he felt short of breath and his skin was turning yellow. He called Respondent and a company representative advised him to park the truck and call an ambulance if he needed one.[27]

¶ 26 Petitioner stayed in a hotel overnight and felt better the next morning. He informed Respondent, and Petitioner and Respondent decided that Petitioner would continue on to Phoenix, Arizona, and seek medical treatment after delivering his cargo.[28] While in Pocatello, Petitioner had the truck repaired by Central Equipment Company, whose repair shop put silicone around the truck's exhaust manifold and tightened the exhaust bolts and clamps on October 26, 2002.[29]

¶ 27 Petitioner arrived in Phoenix on the evening of October 27, 2002, and spent the night in the sleeper portion of his truck cab. The mild weather allowed him to turn the truck off and sleep with the windows open. The following morning, he delivered his cargo and went to Respondent's local offices. He wanted to seek medical treatment and did not want to drive his truck any further, so he had another driver take his truck to Respondent's repair shop while he followed in the other driver's truck.[30]

¶ 28 After dropping off Petitioner's truck, the second driver drove him to a clinic. The clinic drew Petitioner's blood and told him it would be several hours until they had test results, so Petitioner checked into a motel. Petitioner testified that he was turning orange, and the clinic had advised him to call 911 if his condition worsened overnight. Later that evening, he called 911 and was taken by ambulance to a local emergency room. From

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[26] Trial Test.

[27] Trial Test.

[28] Trial Test.

[29] Ex. 9.

[30] Trial Test.

there, he was transported to Arrowhead Hospital and admitted.[31]

¶ 29 On October 29, 2002, Petitioner's carboxyhemoglobin levels tested at 0.6%, which was within normal limits.[32]

¶ 30 Also on October 29, 2002, Williams Detroit Diesel-Allison in Phoenix, Arizona, examined Petitioner's truck for an exhaust leak and discovered that the exhaust manifold was fretted between joints, which allowed exhaust leakage. Williams Detroit Diesel-Allison replaced the exhaust manifold.[33]

¶ 31 Petitioner's description of the exhaust smell in his semi-truck cab is consistent with Hall's explanation that leaking exhaust could get into the cab when it was idling, and that more fumes would enter the cab if the fan were turned on. Both Petitioner's employer and the independent repair shop found and repaired exhaust leaks on Petitioner's semi-truck. I find that Petitioner's truck had either ongoing or consecutive exhaust leaks, and that Petitioner was exposed to exhaust fumes while inside the cab of his semi-truck.

Dr. Edward Hurley Charles

¶ 32 Dr. Edward Hurley Charles is a physician specializing in general surgery with an office in Glendale, Arizona.[34] Dr. Charles examined Petitioner at Arrowhead Hospital in early November 2002, and treated him for jaundice and gallstones.[35] He concluded that Petitioner had a liver injury or liver failure as well as gallstones, but he was not sure if the gallstones contributed to the liver failure. Petitioner's jaundice suggested that he might have gallstones in the common bile duct.[36]

¶ 33 Dr. Charles recommended removal of Petitioner's gallbladder and evaluation of his common bile duct to remove stones, if any were present there.[37] Dr. Charles performed the surgery on November 4, 2002.[38] Petitioner's gallbladder appeared shrunken and filled with stones, but Dr. Charles did not find any gallstones in the common bile duct.

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[31] Trial Test.

[32] Ex. 32 at 2 and 7.

[33] Ex. 11 at 1.

[34] Charles Dep. 4:11-19.

[35] Charles Dep. 9:3-7.

[36] Charles Dep. 10:7-25.

[37] Charles Dep. 11:1-5.

[38] Charles Dep. 8:16-18.

Petitioner's liver was slightly enlarged.[39] Dr. Charles did not find any evidence that a nearby stone had pressed on the outside of the common bile duct to cause a blockage.[40] After a liver biopsy, Dr. Charles concluded that Petitioner's gallstones and gallbladder disease were separate and distinct from his liver problems, and that his gallbladder disease was not causing his liver failure.[41]

¶ 34 While Petitioner concedes that his gallbladder condition was unrelated to any carbon monoxide exposure, he contends that he suffered subacute liver failure, chemical hepatitis, brain damage, and neurological injury as a result of carbon monoxide exposure.[42]

¶ 35 Dr. Charles admitted that diagnosing the cause of liver failure is outside his area of expertise.[43] He could not opine whether Petitioner's liver failure was caused by carbon monoxide exposure.[44] Dr. Charles discussed Petitioner's carbon monoxide exposure with him at the time of his hospitalization. However, Dr. Charles stated that although it was an "interesting coincidence" that Petitioner suffered liver failure at around the same time as his carbon monoxide exposure, any connection he could make between that and his liver failure would be speculative.[45] Dr. Charles also stated that he believes that factors other than Petitioner's gallbladder condition led to his liver condition.[46]

Kerry Stutzman

¶ 36 Petitioner was released from the hospital on November 2, 2002, but suffered from complications and was re-admitted on November 6, 2002.[47] Respondent's claims adjuster referred Petitioner's case for medical management to Intracorp, who assigned the case to

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[39] Charles Dep. 11:23 - 12:5.

[40] Charles Dep. 12:8-18.

[41] Charles Dep. 13:13-22.

[42] Pre-Trial Order at 2-4.

[43] Charles Dep. 17:4-11.

[44] Charles Dep. 19:18 - 20:4.

[45] Ex. 2 to Charles Dep. at 18.

[46] Ex. 5 at 21.

[47] Ex. 32 at 4.

Kerry Stutzman on November 1, 2002.[48] Stutzman is a registered nurse[49] who was employed by Intracorp.[50] Stutzman worked as a field case manager, which is commonly called a nurse case manager in Montana.[51]

¶ 37 Shortly after being assigned his case, Stutzman visited Petitioner in the hospital.[52] At the time, it had not been determined whether carbon monoxide exposure was a factor in causing or aggravating his medical problems.[53] The attending physician suggested that Stutzman ask an environmental medicine specialist to investigate.[54] Stutzman attempted to locate an environmental medicine specialist through the other physicians involved in Petitioner's case. When this effort failed to turn up any leads, Stutzman looked in the phone book, where she found Dr. Stuart Z. Lanson, M.D.[55]

¶ 38 Stutzman assisted Petitioner in making the first appointments to see Dr. Lanson.[56] Stutzman became concerned that Dr. Lanson's treatments were unusual, and she contacted another facility to inquire whether the treatment Petitioner was receiving was appropriate. After speaking with a doctor who agreed with Stutzman that some of Dr. Lanson's practices were questionable, Stutzman recommended to Respondent's claims adjuster that a toxicologist review Petitioner's case.[57] Stutzman's involvement with Petitioner's case ended in early March 2003.[58]

Dr. Stuart Z. Lanson

¶ 39 Dr. Lanson is a physician with an office in Scottsdale, Arizona.[59] He is board-

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[48] Stutzman Dep. 12:2-17.

[49] Stutzman Dep. 6:23-25.

[50] Stutzman Dep. 4:24 - 5:1.

[51] Stutzman Dep. 7:21-25.

[52] Stutzman Dep. 13:6-10.

[53] Stutzman Dep. 13:23-25.

[54] Stutzman Dep. 14:18-23.

[55] Stutzman Dep. 15:3-13.

[56] Stutzman Dep. 19:4-12.

[57] Stutzman Dep. 23:24 - 24:7.

[58] Stutzman Dep. 35:6-16.

[59] Lanson Dep. 4:11-14.

certified in otolaryngology and environmental medicine.[60] Dr. Lanson has hospital privileges in otolaryngology only.[61] Dr. Lanson restricts his practice to environmental medicine and has not used his hospital privileges in eight years.[62] The specialty of environmental medicine incorporates the fields of allergy, immunology, toxicology, nutrition, and general medicine. Board certification in this field qualifies a physician to evaluate and treat patients who have illnesses related to environmental exposures.[63]

¶ 40 Dr. Lanson first saw Petitioner in November 2002.[64] Petitioner initially complained of headaches, memory difficulties, dizziness, itching, abdominal cramps, diarrhea, nausea, jaundice, swelling and discomfort in his extremities, and cold hands.[65] Petitioner also gave a history of "chemical sensitivity."[66]

¶ 41 Based on the history Petitioner provided, Dr. Lanson concluded that Petitioner was exposed to chronic low-level carbon monoxide exposure of a level sufficient to cause injury. Dr. Lanson concluded that Petitioner was exposed to the greatest amount of carbon monoxide while he drove his truck because Petitioner reported that his symptoms worsened when he was in the truck and improved when he was not in the truck.[67] Dr. Lanson has not treated any other patients for low-level carbon monoxide exposure and he notes that to be exposed to low levels of carbon monoxide over long periods of time is a fairly unusual occurrence.[68]

¶ 42 Dr. Lanson opined that Petitioner's liver condition was chemical hepatitis caused by Petitioner's exposure to carbon monoxide.[69] Dr. Lanson explained that Petitioner's lab results showed elevated liver enzymes, which are inconsistent with obstructive biliary disease and are more consistent with inflammatory disease of the liver. Dr. Lanson also tested Petitioner's venous oxygen and found it to be over 70, while venous oxygen is

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[60] Lanson Dep. 6:2-4.

[61] Lanson Dep. 35:8-20.

[62] Lanson Dep. 35:25 - 36:7.

[63] Lanson Dep. 6:18-23.

[64] Lanson Dep. 7:3-9.

[65] Lanson Dep. 8:1-17.

[66] Lanson Dep. 11:15-16.

[67] Lanson Dep. 40:7 - 41:16.

[68] Lanson Dep. 16:15-25.

[69] Lanson Dep. 12:13-25.

normally in the 28 to 40 range.[70] Dr. Lanson explained that a venous oxygen level of 70 indicates a problem in the vascular or capillary bed, and that absent a congenital heart disorder, capillary bed dysfunction is associated with chemical injury.[71] However, he conceded that no peer-reviewed literature maintains that chronic low-level carbon monoxide exposure causes capillary bed damage.[72]

¶ 43 Dr. Lanson also conducted skin tests because in patients with chemical injuries he finds an increased sensitivity to certain triggers such as pollens and molds. Petitioner reacted to some of the substances and Dr. Lanson concluded that he suffered from immune dysregulation.[73] Dr. Lanson conceded that since Petitioner had never previously been tested for these sensitivities, these sensitivities could have pre-dated his carbon monoxide exposure.[74] He further opined that Petitioner's gallbladder condition and gallstones were unrelated to carbon monoxide exposure, and were independent conditions.[75] Dr. Lanson does not know of any peer-reviewed literature which supports his conclusion that low-level carbon monoxide poisoning causes the conditions he has attributed to it in Petitioner's case.[76]

¶ 44 As Dr. Lanson continued to treat Petitioner, some of his complaints improved, but others did not. Petitioner developed neuropathy. Dr. Lanson stated that Petitioner developed short-term memory issues and his cognitive dysfunction became more apparent both to Petitioner and Dr. Lanson. He also became more sensitive to certain foods, "exposures," and supplements.[77] Dr. Lanson believed Petitioner had a toxic brain syndrome or toxic encephalopathy. He recommended a SPECT scan and psychometric testing, but Petitioner was not able to obtain those tests.[78]

¶ 45 Dr. Lanson conceded that no test he performed confirmed his diagnosis of low-level carbon monoxide exposure, but countered that the fact that Petitioner improved with

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[70] Lanson Dep. 10:2-14.

[71] Lanson Dep. 11:3-12.

[72] Lanson Dep. 44:4-8.

[73] Lanson Dep. 12:2-12.

[74] Lanson Dep. 46:5-10.

[75] Lanson Dep. 13:1-10.

[76] Lanson Dep. 36:17-25.

[77] Lanson Dep. 17:11-25.

[78] Lanson Dep. 18:3-10.

treatment supported his diagnosis.[79]

¶ 46 I do not find Dr. Lanson's diagnoses to be persuasive. Dr. Lanson has never treated another patient with suspected low-level carbon monoxide poisoning. He ran a myriad of tests and concluded that the results were consistent with carbon monoxide poisoning, and yet he conceded that no peer-reviewed literature supports this conclusion. I also note that neither Petitioner's nor Respondent's medical experts agree with Dr. Lanson's treatments and conclusions.

¶ 47 Furthermore, in comparison to the other doctors who have evaluated Petitioner's case, Dr. Lanson's credentials are less impressive. His hospital privileges are in otolaryngology, not environmental medicine, and I am uncertain of how to weigh his board certification in environmental medicine. Dr. Emil Bardana has pointed out that this board is not recognized by the American Board of Medical Specialties, and Petitioner has not convinced me to assign the same level of credence to this certification.[80]

¶ 48 In April 2005, Petitioner relocated to Phoenix to treat with Dr. Lanson.[81] Dr. Lanson initially treated Petitioner with IVs, but he now prescribes sublingual drops. Petitioner carries these drops with him most of the time.[82] Petitioner does not know what the sublingual drops contain.[83] Petitioner thinks the IVs and sublingual drops are supposed to repair his immune system.[84] Dr. Lanson also provided Petitioner with a list of foods to avoid because his testing revealed that Petitioner had developed "sensitivities" to them.[85]

¶ 49 Petitioner admitted that he has continued to drink coffee. He explained that by doing so, he was continuing to put a "load" on his immune system, but that drinking coffee helps him think more clearly.[86] Petitioner's diet also requires him to eat his allowed food

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[79] Lanson Dep. 42:3-13.

[80] This Court has previously found a board-certified otolaryngologist who is also board-certified in environmental medicine but not certified by the American Academy of Allergy and Immunology to be unqualified to diagnose and treat a claimant who alleged she had developed multiple chemical sensitivity from her employment. *See Hall v. State Compens. Ins. Fund*, 1999 MTWCC 3.

[81] Trial Test.

[82] Petitioner Dep. 54:16-22.

[83] Petitioner Dep. 71:4-7.

[84] Petitioner Dep. 55:6-10.

[85] Petitioner Dep. 56:8 - 57:21.

[86] Petitioner Dep. 59:21 - 60:15.

items no more frequently than every fourth day.[87] As noted above, I am not persuaded by Dr. Lanson's diagnoses nor by his methods of treating Petitioner's ailments.

Dr. Lindell K. Weaver

¶ 50 Dr. Lindell K. Weaver is board-certified in internal medicine, pulmonary, critical care, undersea and hyperbaric medicine.[88] He has treated patients with hyperbaric oxygen for more than 20 years and estimates that he has seen hundreds of patients with carbon monoxide poisoning.[89] He has authored more than 50 peer-reviewed papers and estimates that over half of them deal with carbon monoxide.[90]

¶ 51 Dr. Weaver conducted an independent medical examination (IME) of Petitioner on October 28, 2003, at the request of Petitioner's attorney.[91] At the time, he concluded that while Petitioner's symptoms were consistent with carbon monoxide poisoning, the poisoning itself was speculative. He reserved his final opinion until he had the opportunity to review the rest of Petitioner's IME results, including his neurological, cardiac, cognitive, and vestibular exams.[92]

¶ 52 When Dr. Weaver saw Petitioner on October 28, 2003, Petitioner complained of headaches, numbness in his feet, fatigue, clumsiness, depression, and some decision-making problems.[93] Dr. Weaver reviewed Petitioner's medical records, took a history, examined Petitioner, and sent Petitioner to specialists for tests.[94] When Dr. Weaver examines a patient with suspected carbon monoxide poisoning, he focuses on their neurological and vestibular examinations because those are areas where carbon monoxide often causes problems. He also relies on a neuropsychological evaluation to evaluate brain injury.[95] Dr. Weaver also orders laboratory tests which are intended to rule out rare disorders and other conditions which could cause similar symptoms to carbon

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[87] Petitioner Dep. 69:1-6.

[88] Weaver Dep. 4:18-20.

[89] Weaver Dep. 5:9-11.

[90] Weaver Dep. 6:4-7.

[91] Ex. 3 to Weaver Dep. at 3.

[92] Ex. 3 to Weaver Dep. at 6.

[93] Weaver Dep. 11:9-13.

[94] Weaver Dep. 6:18-25.

[95] Weaver Dep. 7:12-21.

monoxide poisoning.[96] Dr. Weaver reported that the subsequent testing ruled out several conditions which could have accounted for some of Petitioner's symptoms.[97]

¶ 53 Petitioner had an abnormal neurological exam.[98] Petitioner further had clinical and laboratory evidence of severe hypothyroidism which could account for many of his symptoms.[99] Dr. Weaver concluded that Petitioner could have had carbon monoxide-related damage, but because Petitioner also had hypothyroidism, Dr. Weaver could not be certain of this diagnosis, because hypothyroidism can contribute to fatigue, slow mental thinking, and impaired decision making. In rare instances, it can cause peripheral neuropathy.[100] Hypothyroidism can also cause depression and weight gain.[101] Dr. Weaver attributed Petitioner's hypothyroidism to the radiation therapy he had received for non-Hodgkin's lymphoma, and opined that it was not caused by carbon monoxide poisoning. The hypothyroidism made Dr. Weaver's diagnosis of carbon monoxide poisoning uncertain.[102]

¶ 54 Dr. Weaver amended his report on December 5, 2003, incorporating the findings of Petitioner's other IMEs.[103] At that time, Dr. Weaver concluded that the severe hypothyroidism which the testing revealed could account for almost all of Petitioner's symptoms. In light of the hypothyroidism, Dr. Weaver could not determine if any of Petitioner's problems were caused by exposure to carbon monoxide.[104] Dr. Weaver recommended that Petitioner get his hypothyroidism treated.[105] Dr. Weaver suggested repeating some of the tests after Petitioner's thyroid condition was resolved.[106] Dr. Weaver explained that if Petitioner's hypothyroidism was causing Petitioner's symptoms, those symptoms would improve when his hypothyroidism resolved, although he noted that

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[96] Weaver Dep. 8:5-10.

[97] Ex. 27 at 5-6.

[98] Weaver Dep. 11:14.

[99] Ex. 27 at 6.

[100] Weaver Dep. 11:18-25.

[101] Weaver Dep. 12:1.

[102] Weaver Dep. 12:4-12.

[103] Ex. 3 to Weaver Dep. at 7.

[104] Ex. 3 to Weaver Dep. at 8.

[105] Weaver Dep. 12:13-16.

[106] Ex. 3 to Weaver Dep. at 8.

peripheral neuropathy does not always improve with treatment.[107] People with thyroid conditions, particularly severe thyroid conditions, can develop ongoing neuropathy that does not completely heal.[108] Dr. Weaver stated that neurological problems often get better long after the carbon monoxide exposure, in some instances a year or two later, although the problems may not resolve entirely, and the same is true of neurological problems caused by hypothyroidism.[109]

¶ 55 Petitioner's hypothyroidism was subsequently treated by Petitioner's regular physician, and he is now euthyroid. Dr. Weaver reviewed Petitioner's case subsequent to the resolution of Petitioner's hypothyroidism in October 2006. He then opined that Petitioner suffered from conditions related to carbon monoxide exposure.[110] On October 18, 2006, Dr. Weaver amended his report with another addendum which incorporated updated findings of Dr. John Foley and Dr. Erin Bigler, and noted that Petitioner's thyroid condition had been corrected. Dr. Weaver opined:

> I believe that Mr. Russell certainly could have had carbon monoxide poisoning which has contributed to a peripheral neuropathy, cognitive dysfunction, and depression and anxiety. . . . [S]ince hypothyroidism has since been corrected and Mr. Russell continues to have these problems without an alternative explanation in the setting of proven diesel exhaust leaking and the temporal association between his symptoms and the exhaust leaks, it is more likely than not that Mr. Russell has suffered brain and neurologic injury/damage from carbon monoxide poisoning.[111]

¶ 56 Dr. Weaver testified that while no absolute proof demonstrated carbon monoxide poisoning, Petitioner's truck needed repair on multiple occasions, and perforations or holes were discovered above the exhaust system going into the cab.[112] Dr. Weaver testified:

> [W]e have a source of carbon monoxide diesel exhaust which is rather high in carbon monoxide. We have a way for carbon monoxide to get from the atmosphere into the cab of the truck: holes were discovered in the truck.

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[107] Weaver Dep. 12:22 - 13:6.

[108] Weaver Dep. 51:8-15.

[109] Weaver Dep. 57:4-18.

[110] Weaver Dep. 14:1-5.

[111] Ex. 3 to Weaver Dep. at 9.

[112] Weaver Dep. 14:18-23.

> And then we have his constellation of symptoms which certainly came on at the same time he was driving the truck. Prior to this time he really had no problems like this, and it was only at the time he was driving the truck that he developed these problems.
>
> So what are those problems? Well, we all know that he had gallbladder problems and liver injury. I don't believe any of that is due to carbon monoxide. And Alan Russell may believe some of it is and I think he's had a physician encourage him in that regard, but I don't think his liver problem or his obstructive jaundice, his gallstones, I don't think any of that had anything to do with carbon monoxide. But I do believe that his cognitive problems, his affective problems, and his peripheral neuropathy, the T2 weighted hyperintensities in his brain are due to carbon monoxide.
>
> He also had an abnormal neurological exam when I saw him, and I think that's due to carbon monoxide. Because I don't have another explanation.[113]

¶ 57 Dr. Weaver disagrees with Dr. Lanson's diagnosis of chemical hepatitis.[114] Dr. Weaver also disagrees with Dr. Brent Burton's statement, discussed later in these Findings, that in order for carbon monoxide poisoning to occur, there must be a loss of consciousness.[115] Dr. Weaver further stated that Dr. Burton's opinion is contrary to contemporary research in carbon monoxide toxicology, and that peer-reviewed literature of the last two years has demonstrated that loss of consciousness is unimportant.[116]

¶ 58 Dr. Weaver testified that the ideal objective evidence which demonstrates chronic low-dose exposure to carbon monoxide would be proof of exposure and exhibiting of expected symptoms. Neurological examinations, vestibular function, brain MRI imaging, and neuropsychological testing can add to that.[117] Dr. Weaver considers neuropsychological testing to be objective medical evidence.[118]

Dr. John Francis Foley

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[113] Weaver Dep. 15:3 - 16:3.

[114] Weaver Dep. 16:22 - 17:3.

[115] Weaver Dep. 20:12-18.

[116] Weaver Dep. 21:1-22.

[117] Weaver Dep. 41:20 - 42:2.

[118] Weaver Dep. 42:3-8.

¶ 59 Dr. John Francis Foley was part of a panel of doctors who examined Petitioner in Salt Lake City.[119] He is a board-certified neurologist. Dr. Foley has been part of his practice group in Salt Lake City for approximately 16 years.[120] He also holds a clinical faculty position at the University of Utah and is the director of the neurology division at LDS Hospital.[121] He has evaluated over one hundred patients who have been exposed to carbon monoxide.[122]

¶ 60 Dr. Foley evaluated Petitioner on October 30, 2003. He took a history from Petitioner and performed a neurological examination. He then reported the results to Dr. Weaver.[123] According to Dr. Foley's history, Petitioner had been exposed to a defective exhaust system in his sleeper cab for approximately one year.[124] Petitioner reported that his symptoms began with headaches and numbness of the hands and feet and escalated to disorientation.[125]

¶ 61 Dr. Foley's neurological exam revealed peripheral neuropathy, "stocking-glove hypesthesia," which is a sensation reduction to pinprick and cold stimulus, and decreased vibration sensation in Petitioner's toes. Dr. Foley also performed a Sharpened Romberg exam, which he explained is a challenging exam, but one that should be able to be performed by a healthy man Petitioner's age. Petitioner was unsuccessful in completing the exam, which Dr. Foley explained is typical of patients who have been exposed to carbon monoxide, but which also occurs with patients who have peripheral neuropathy in general.[126] Based on his neurological examination, Dr. Foley concluded that Petitioner possibly had low-level carbon monoxide exposure. At the time, Dr. Foley did not have additional data which was obtained from an MRI, a vestibular evaluation, and a neuropsychological evaluation, all of which he felt would help him solidify his diagnosis.[127]

¶ 62 In his report, Dr. Foley concluded that it was possible that Petitioner had been exposed to chronic low-level carbon monoxide. He determined that Petitioner did not have

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[119] Foley Dep. 3:9-19.

[120] Foley Dep. 4:19 - 5:1.

[121] Foley Dep. 5:4-9.

[122] Foley Dep. 6:12-20.

[123] Foley Dep. 7:9-15.

[124] Foley Dep. 7:20-25.

[125] Foley Dep. 8:1-4.

[126] Foley Dep. 8:14 - 9:11.

[127] Foley Dep. 9:17-22.

"a classic history for carbon monoxide exposure."[128] Additional testing done on Petitioner the following day also indicated that Petitioner had a low-grade peripheral neuropathy.[129] Dr. Foley concluded that Petitioner's condition was consistent with low-level chronic carbon monoxide intoxication, although not clearly diagnostic of it.[130] Dr. Foley saw Petitioner again on September 27, 2004, and scheduled a repeat neurologic and nerve conduction examination for October 12, 2004.[131] After the October 12, 2004, neurological exam, Dr. Foley concluded that while many of Petitioner's neurological symptoms remained, overall Petitioner's condition had improved.[132] Dr. Foley opined,

> The association between this patient's low-grade neuropathy and carbon monoxide exposure remains somewhat tenuous. He has, however, certainly
>
> had some improvement neurophysiologically concurrent with a period of time in which he has had no further carbon monoxide exposure.[133]

¶ 63 At his deposition on January 19, 2007, Dr. Foley opined that he believes to a reasonable degree of medical certainty that Petitioner suffered neurological effects from carbon monoxide exposure.[134] Dr. Foley explained the basis for his opinion:

> Essentially certainly what is most helpful is to have a carboxyhemoglobin, the blood level or an ambient carbon monoxide level when we're evaluating cases like this, because that does help us. But unfortunately, in this case we don't have that. We just have the fact that there was an exhaust problem and we have his history and then his examination. And a lot of this kind of hinges on the company that it keeps.
>
> So there are some things that we look at that kind of go together. For instance, the fact that his Sharpened Romberg is abnormal on his examination. I'm certainly taking his history at face value as he told it to me, which is consistent with a carbon monoxide exposure. He has an MRI of the

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[128] Ex. 3 to Weaver Dep. at 61-62.

[129] Foley Dep. 10:16 - 11:6.

[130] Ex. 3 to Weaver Dep. at 64.

[131] Foley Dep. 11:9-19.

[132] Foley Dep. 11:21 - 12:11.

[133] Ex. 43.

[134] Foley Dep. 14:10-25.

> brain which reveals kind of nonspecific small white matter abnormalities which don't say specifically this is carbon monoxide exposure on them but would be consistent with a history of longer term carbon monoxide exposure.
>
> He has a vestibular evaluation done by the Hearing and Balance Center which shows only mild central ocular motor deficiency, but again something that could be related to carbon monoxide exposure, not definitive.
>
> And then we have his neuropsychological evaluation in which the report is "current neuropsychological studies do reflect mild deficits in short-term memory function and verbal memory." Again, not definitive, but when one takes the history, that neurological examination, and the ancillary testing into consideration and tries to come to a formulation, it certainly in my mind is reasonable to say to a reasonable degree of medical certainty or probability that there was an exposure that occurred.[135]

Dr. Foley further stated that given Petitioner's history, he could not suggest another specific disease which could account for the same constellation of symptoms.[136]

¶ 64 Dr. Foley did not examine any of Petitioner's medical records which pre-dated his driving the semi-truck in question.[137] Dr. Foley acknowledged that Petitioner's peripheral neuropathy could have preexisted his carbon monoxide exposure, because peripheral neuropathy is a fairly common condition and it would be more typical that carbon monoxide exposure would exacerbate a preexisting peripheral neuropathy than cause a peripheral neuropathy to develop.[138] Dr. Foley further pointed out that peripheral neuropathy is only atypically associated with carbon monoxide exposure.[139] Although it has been described in medical literature, it is uncommon.[140] Dr. Foley clarified that while he believes it is a greater than 50% probability that Petitioner's "symptom complex and associated neurological testing, including neuropsychology, MRI, and neurovestibular testing" are consistent with carbon monoxide exposure, he does not believe Petitioner's peripheral neuropathy solely originated from carbon monoxide exposure.[141]

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[135] Foley Dep. 15:3 - 16:13.

[136] Foley Dep. 17:3-14.

[137] Foley Dep. 19:24 - 20:2.

[138] Foley Dep. 20:20 - 21:6.

[139] Foley Dep. 21:6-9.

[140] Foley Dep. 21:12-15.

[141] Foley Dep. 23:17 - 24:1.

¶ 65 While Dr. Foley, in spite of his reservations, ultimately opined that to a reasonable degree of medical certainty Petitioner had been injured by carbon monoxide poisoning, at the time he rendered that opinion, Dr. Foley did not know that he had severe hypothyroidism. Dr. Foley testified said there is "no question" that severe hypothyroidism can cause this type of neuropathy.[142] In light of Dr. Foley's testimony, I am not persuaded that Petitioner's peripheral neuropathy was caused by his carbon monoxide exposure as it appears more likely to have been caused by his hypothyroidism. Dr. Foley noted Petitioner's unsuccessful attempt at the Sharpened Romberg test is typical of patients suffering from carbon monoxide exposure. However, Dr. Foley further noted that these results are also typical of patients with peripheral neuropathy, which Petitioner also has.

¶ 66 With respect to Petitioner's cognitive difficulties, both Dr. Weaver and Dr. Foley attribute Petitioner's cognitive difficulties to his carbon monoxide exposure. Moreover, the objective medical finding of the T2 weighted hyperintensities in Petitioner's brain further bolsters this conclusion. It is undisputed that Dr. Weaver is a leading expert in the field of hyperbaric medicine. I further find the testimony of Drs. Weaver and Foley to be particularly persuasive because the evidence demonstrates that they both approached Petitioner's case with some skepticism and Dr. Weaver refused to even render an opinion until Petitioner's hypothyroidism was resolved and certain tests could be reperformed after

Petitioner was found to be euthyroid. Dr. Weaver's outstanding qualifications and his conservative and skeptical approach to this very complicated case cause me to find his opinions particularly persuasive.

Erin David Bigler, Ph.D.

¶ 67 Erin David Bigler, Ph.D. gave Petitioner a neuropsychological evaluation on October 29, 2003. The results indicated short-term memory deficits and significant symptoms of depression. Petitioner also reported sleep disturbance and pain, which Dr. Bigler noted could also impact memory performance.[143] Petitioner returned for a follow-up assessment with Dr. Bigler on November 23, 2004, after which he concluded that while Petitioner's cognitive functions had improved since his previous testing, he was experiencing greater depression and anxiety.[144]

Dr. Emil J. Bardana, Jr.

¶ 68 Dr. Emil J. Bardana, Jr., was retained by Respondent to offer an expert opinion in

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[142] Foley Dep. 24:5-9.

[143] Ex. 3 to Weaver Dep. at 54.

[144] Ex. 3 to Weaver Dep. at 79-80.

this matter. Dr. Bardana resides in Lake Oswego, Oregon, and works half-time at the Oregon Health and Science University as a Professor of Medicine in the Division of Allergy and Clinical Immunology. He is board-certified in internal medicine, allergy, and immunology.[145]

¶ 69 In his February 19, 2003, report, Dr. Bardana expressed his opinions regarding Petitioner's medical conditions. Dr. Bardana reviewed Petitioner's medical records and summarized his medical history through December 20, 2002.[146] After his records review, Dr. Bardana concluded that Petitioner's history of carbon monoxide exposure was unconfirmed and that no evidence supported a conclusion that he had suffered from carbon monoxide intoxication. Dr. Bardana further concluded that no evidence supported a diagnosis of clinical allergy, immune dysregulation, or any other type of hypersensitivity disorder.[147]

¶ 70 Dr. Bardana stated that he is not aware of any controlled study which has determined whether chronic low doses of carbon monoxide could cause brain or liver damage, but that from a scientific standpoint, it does not make sense that a chronic low-dose exposure could do so. Dr. Bardana pointed out that cigarette smokers are exposed to chronic low doses of carbon monoxide, and although they suffer a myriad of health problems from smoking, chronic brain damage, peripheral neuropathy, and liver toxicity are not among those negative health effects.[148]

¶ 71 Dr. Bardana testified that while Dr. Weaver has written cutting edge articles in prestigious journals, these articles address acute carbon monoxide exposure, not chronic, low-dose exposures. Dr. Bardana admitted that Dr. Weaver has treated far more patients for acute carbon monoxide poisoning than he has. Dr. Bardana disagrees with Dr. Burton's assertion that a person has to lose consciousness in order to suffer brain damage from carbon monoxide intoxication, and he agrees with Dr. Weaver's conclusion that it is possible to suffer brain damage without loss of consciousness. Dr. Bardana noted that the medical literature demonstrates not everyone with brain damage from acute carbon monoxide intoxication suffered a loss of consciousness. However, he added that from Dr. Weaver's writings, it appears that it is a level just prior to a loss of consciousness, perhaps accompanied by total disorientation, where a person could suffer brain damage.[149]

¶ 72 Dr. Bardana testified that during his examination of Petitioner, he began to wonder

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[145] Trial Test.

[146] Ex. 32 at 1-7.

[147] Ex. 32 at 7.

[148] Trial Test.

[149] Trial Test.

if he had sleep apnea, because he had the symptoms for it. Dr. Bardana explained that people with sleep apnea may get hypoxic and have periods of time while sleeping where their oxygenation drops to 70% or 80% or lower. Because people with untreated sleep apnea do not get restorative sleep, they suffer from fatigue and cognitive difficulties. Dr. Bardana also noted that many of the prescription medications Petitioner takes, as well as depression, could cause sleeplessness which in turn would cause cognitive difficulties.[150]

¶ 73 Dr. Bardana expressed doubts about Dr. Lanson's diagnoses and treatments. Dr. Bardana stated that the venous blood oxygen test Dr. Lanson performed is "a useless test having no diagnostic utility."[151] Dr. Bardana opined that Petitioner's gallbladder disease developed over many years and was unrelated to carbon monoxide exposure. Dr. Bardana claimed that no existing medical literature has associated this type of gallbladder disease with carbon monoxide exposure, nor is there evidence linking carbon monoxide exposure with chemical hepatitis. Dr. Bardana stated:

> The assertions by Dr. Stuart Z. Lanson are completely unfounded and unsupported in the scientific literature. His claim of allergies to various constituents such as carbon monoxide is clinically untenable and immunologically impossible. It has never been described in the literature. The skin testing that was carried out in his office was clearly unnecessary and by methodology that probably is unscientific as well. There was no evidence of any clinical symptomatology to suggest allergy to foods, aeropollens or any other type of antigen and I do not believe based upon the evidence in the medical records that Mr. Russell had any problems with clinical allergic symptoms or the need to be desensitized now or ever. He clearly does not have immune dysregulation, there is no evidence for vasculitis, there is no evidence that warrants the use of oxygen or any dietary management suggested by Dr. Lanson other than the prudent diet one should follow after such a violent episode of gallbladder disease.[152]

¶ 74 Dr. Bardana further noted that carbon monoxide is present in tobacco smoke and that Petitioner is a former smoker.[153] Dr. Bardana stated that Petitioner never reported any of the symptoms associated with carbon monoxide exposure such as nausea, dizziness, roaring in the ears, weakness, blackened vision, and sleepiness. Dr. Bardana concluded that no evidence suggests Petitioner was exposed to significant levels of carbon monoxide, and that no association has been proven between carbon monoxide exposure and the

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[150] Trial Test.

[151] Ex. 32 at 6.

[152] Ex. 32 at 8.

[153] *Id.*

symptoms and conditions which he reported.[154]

¶ 75 On July 10, 2006, Dr. Bardana issued a follow-up report based on his review of additional medical records. Dr. Bardana also addressed Dr. Lanson's April 23, 2003, letter to Petitioner's counsel in which Dr. Lanson refuted Dr. Bardana's criticisms of his diagnoses and treatment of Petitioner. Dr. Bardana pointed out that although Dr. Lanson stands by his diagnosis of chemical hepatitis, a liver biopsy found no sign of hepatitis. Dr. Bardana further asserted that while Dr. Lanson maintains he is board-certified in environmental medicine, this is not one of the boards recognized by the American Board of Medical Specialties and is "an outlier board that has no official status."[155]

¶ 76 Dr. Bardana further reviewed the October 2003 IME reports from Drs. Weaver, Bigler, and Foley, as well as a pulmonary function report from Dr. Alan Morris, a vestibular evaluation by Dr. Robert Baird, and an evaluation from cardiologist Dr. Kevin Walsh.[156] Dr. Bardana reviewed Dr. Weaver's December 5, 2003, addendum, and Petitioner's follow-up visits to Dr. Fullerton and Dr. Lanson.[157] Dr. Bardana revised his assessment to include several items, including "**Possible obstructive sleep apnea** (not fully evaluated) with hypersomnolence."[158]

¶ 77 Dr. Bardana noted that it was impossible to know when the exhaust leak began in Petitioner's truck, or how much carbon monoxide entered the truck cab. Based on the lack of a carbon monoxide monitor in the cab, Petitioner's never having lost consciousness, and a normal carbon monoxide level in his blood when it was tested at the hospital, Dr. Bardana concluded that Petitioner's exposure to excessive levels of carbon monoxide was speculative. Dr. Bardana opined that the only evidence which supports the possibility that Petitioner suffered from carbon monoxide poisoning is his peripheral neuropathy, but that peripheral neuropathy is consistent with uncontrolled hypothyroidism. Furthermore, while peripheral neuropathy may occur as a result of chronic carbon monoxide intoxication, it is not a "classical finding."[159] Dr. Bardana further maintained that Petitioner's "most significant carbon monoxide exposure" would have been during the time period that he smoked, and that Petitioner further may have been exposed to high levels of carbon monoxide during the two summers he worked with the firefighting crews.[160] Dr. Bardana

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[154] Ex. 32 at 9.

[155] Ex. 32 at 20-21.

[156] Ex. 32 at 22-25.

[157] Ex. 32 at 25-30.

[158] Ex. 32 at 31-32. (Emphasis in original.)

[159] Ex. 32 at 32.

[160] Ex. 32 at 33.

asserted that a 1.5 pack per day smoker has a chronic carbon monoxide blood level of between 4% and 5%.[161] Dr. Bardana noted that Petitioner's carboxyhemoglobin level tested at 0.6% on October 29, 2002.[162]

¶ 78 On September 5, 2006, Dr. Bardana issued another report after having conducted an IME of Petitioner on August 28, 2006. In preparing the report, Dr. Bardana reviewed additional medical records and examined Petitioner in person. The examination included taking a history and a physical examination.[163] Among the history taken, Dr. Bardana noted that Petitioner stated that he has sleep problems and was told that he might have obstructive sleep apnea, but had not been evaluated for it.[164]

Dr. Brent T. Burton

¶ 79 Respondent requested Dr. Brent T. Burton to conduct a records review of Petitioner's case. Dr. Burton's findings were set forth in a letter to Respondent's counsel on December 27, 2006.[165] Dr. Burton is self-employed as a physician specializing in occupational medicine and medical practice. He is board-certified in occupational medicine, medical toxicology, and emergency medicine. His work in medical toxicology includes carbon monoxide intoxication, and he estimates he has been involved in hundreds of cases involving carbon monoxide exposure.[166]

¶ 80 Dr. Burton opined that none of the symptoms Dr. Weaver attributed to carbon monoxide exposure would occur except in severe, near-fatal cases, and that a loss of consciousness would be necessary.[167] Dr. Burton stated that permanent brain injury can only occur if the victim loses consciousness.[168] Dr. Burton opined that Petitioner's symptoms were inconsistent with carbon monoxide intoxification. Dr. Burton explained that exposure to excessive carbon monoxide causes a person's carboxyhemoglobin levels to rise. Dr. Burton noted that Petitioner described a constant, non-throbbing headache, while

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[161] Ex. 32 at 72.

[162] Ex. 32 at 2.

[163] Ex. 32 at 35.

[164] Ex. 32 at 66.

[165] Ex. 40.

[166] Trial Test.

[167] Ex. 40 at 3.

[168] Ex. 40 at 5.

carbon monoxide exposure typically causes a severe, throbbing headache which resolves as soon as a person's level of carboxyhemoglobin normalizes. Dr. Burton further opined that if diesel exhaust fumes were leaking into Petitioner's cab in enough quantity to cause carbon monoxide intoxication, the other pollutants in the exhaust would have first caused Petitioner to experience significant eye and airway irritation, which Petitioner did not report. Dr. Burton found it particularly significant that Petitioner was able to continue operating his truck without mishap, and that he never experienced central nervous system impairment. Although Petitioner reported smelling diesel exhaust in the cab of his truck, Dr. Burton opined that it was normal to smell diesel exhaust on occasion while operating a diesel engine. Dr. Burton concluded that, while the semi-truck's exhaust system may have leaked, there was no evidence that significant quantities of carbon monoxide entered the cab of the truck.[169]

¶ 81 Dr. Burton opined that the belief that chronic low-dose exposure to carbon monoxide can cause brain or liver damage is without scientific merit. He stated that most people will experience some symptoms if their carboxyhemoglobin levels rise above 20% or 30%, but that after the person has ceased being exposed to a high level of carbon monoxide, their symptoms will resolve without permanent impairment. Permanent impairment does not result until the brain becomes hypoxic and is no longer receiving enough oxygen to function, which leads to the death of brain cells. However, this level of hypoxia also results in a loss of consciousness.[170]

¶ 82 Dr. Burton opined that in Petitioner's case, the evidence does not support a conclusion that he suffered hypoxia that would result in permanent impairment. Dr. Burton testified that if Petitioner's exposure to carbon monoxide had been substantial enough to cause hypoxia, he would have exhibited symptoms such as confusion and poor judgment akin to alcohol intoxication, and it is unlikely he would have been able to continue to safely operate his truck safely under those conditions.[171]

¶ 83 Dr. Burton testified that Petitioner was seriously ill at the time of his hospitalization in October 2002. However, he believes the symptoms Petitioner attributes to carbon monoxide exposure are more readily explained by other medical conditions which Petitioner has been diagnosed with, including his thyroid condition.[172]

Kelly Ann Russell

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[169] Ex. 40 at 4.

[170] Trial Test.

[171] Trial Test.

[172] Trial Test.

¶ 84 Petitioner's daughter Kelly Ann Russell testified at trial. I find her testimony to be credible. Ms. Russell testified that prior to working for Respondent, Petitioner was active and in good physical condition. He was mentally sharp and did not tire easily. In the months immediately prior to October 2002, Ms. Russell did not see Petitioner, but spoke with him regularly by telephone and knew that he was experiencing some difficulties and that he was concerned about an exhaust leak in his truck. After Petitioner was released from the hospital following his gallbladder surgery, Ms. Russell observed significant changes in Petitioner's physical and cognitive ability. His speech was jumbled and he had difficulty remembering things. He complained about pain in his feet and became fatigued easily. She testified that Petitioner does not remember things as well as he used to and she has to repeat information to him.[173]

Petitioner

¶ 85 Petitioner believes he has slowly improved since October 28, 2002, although he still has difficulty writing and remembering some things. Petitioner first discovered that he was having difficulty performing cognitive tasks as he was recovering from his gallbladder surgery. He could not remember how to write a check. Petitioner testified that on most days, he only got out of bed when he had to, and the only activity he completed was getting a newspaper and cup of coffee.[174] Petitioner has not felt that he could return to work since October 28, 2002, but testified that he would like to return to work if he could.[175]

¶ 86 I find Petitioner to be a credible witness in the sense that I believe he has testified to the best of his recollection and has no intention to deceive the Court. I do not doubt the sincerity of Petitioner's beliefs, nor do I doubt that he does indeed suffer from several serious medical conditions. However, I cannot attribute all of Petitioner's medical conditions to his carbon monoxide exposure. I have not found Dr. Lanson's diagnoses to be persuasive, nor do I find Dr. Charles' opinion that Petitioner's liver disease was not caused by his gallbladder disease but by another source – presumably the carbon monoxide exposure – to be more than speculation outside Dr. Charles' expertise.

¶ 87 I find that Petitioner's personal opinions as to the cause of his conditions are heavily influenced by Dr. Lanson's diagnoses and unconventional medical approach. Petitioner has unquestioningly followed Dr. Lanson's recommendations, adhering to a strict diet and purchasing and consuming multitudinous sublingual drops which, while Petitioner admits he does not know what specifically the diet and sublingual drops are meant to accomplish,

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[173] Trial Test.

[174] Trial Test.

[175] Trial Test.

he nonetheless asserts, "They are what's keeping me alive."[176] With the exception of Petitioner's cognitive impairments, the conditions and symptoms which he attributes to carbon monoxide poisoning can be explained by other conditions with which he has been diagnosed. Therefore, while I believe that Petitioner has testified in a forthright manner and to the best of his ability, I regard his testimony somewhat skeptically and give it less weight than might otherwise be the case. I find the medical evidence to carry significantly more weight in determining whether Petitioner's medical conditions relate to his work-related carbon monoxide exposure.

## CONCLUSIONS OF LAW

¶ 88 This case is governed by the 2001 version of the Montana Workers' Compensation Act since Petitioner's last day of work was in October 2002, and that was the law in effect on that date.[177]

¶ 89 Petitioner bears the burden of proving by a preponderance of the evidence that he is entitled to the benefits he seeks.[178] The Court concludes that Petitioner has met this burden only in regards to his cognitive impairment for the reasons set forth below.

¶ 90 The medical records are extensive in this case. Although all of Petitioner's symptoms can be explained by one of his other diagnosed conditions, Dr. Weaver, who I find to be the most qualified medical expert in this case, opined that while most of Petitioner's medical conditions have alternate, more plausible explanations, it is more probable than not that Petitioner's cognitive impairments were caused by his work-related exposure to carbon monoxide.

¶ 91 Petitioner argues that Dr. Lanson is his treating physician and therefore his opinions should be given more weight. As a rule, the opinions of treating physicians are entitled to greater weight in this Court. However, as this Court and the Montana Supreme Court have held, the treating physician's opinion is not conclusive and this Court remains the finder of fact.[179] Recently in *Stewart v. Liberty Northwest Ins. Corp.*,[180] I was not persuaded by the opinions of a treating physician who, while admitting that he had no idea how the claimant's symptoms could be related to her surgery, nonetheless opined that since her symptoms appeared after the surgery, they must have been caused by it. I find that

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[176] Trial Test.

[177] *Grenz v. Fire & Cas. of Conn.*, 278 Mont. 268, 271, 924 P.2d 264, 266 (1996).

[178] *Ricks v. Teslow Consol.,* 162 Mont. 469, 512 P.2d 1304 (1973); *Dumont v. Wickens Bros. Constr. Co.*, 183 Mont. 190, 598 P.2d 1099 (1979).

[179] *Copeland v. Montana State Fund*, 2006 MTWCC 45, ¶ 37 (citations omitted).

[180] *Stewart,* 2007 MTWCC 41, ¶¶ 29-30.

analogous to the present case, where Dr. Lanson has concluded that Petitioner's symptoms must have been caused by carbon monoxide poisoning because when he treated him, his symptoms were alleviated. However, in the present case, Dr. Lanson admitted that Petitioner's chemical sensitivities may pre-date his alleged carbon monoxide poisoning. As I concluded in *Stewart*, a treating physician's mere opinion that an alleged injury and subsequent symptoms are causally related, without more evidence, is insufficient to meet Petitioner's burden of proof.

¶ 92 Under § 39-72-408(1), MCA, occupational diseases are considered to arise out of the employment if:

> (a) there is a direct causal connection between the conditions under which the work is performed and the occupational disease;
> (b) the disease can be seen to have followed as a natural incident of the work as a result of the expose occasioned by the nature of the employment;
> (c) the disease can be fairly traced to the employment as the proximate cause;
> (d) the disease comes from a hazard to which workers would not have been equally exposed outside of the employment.

¶ 93 Causation is an essential element to benefit entitlement. The claimant has the burden to prove a causal connection by a preponderance of the evidence.[181] While I am persuaded that Petitioner was exposed to elevated levels of carbon monoxide over an extended period of time while driving Respondent's semi-truck, based on the extensive medical evidence before me, I conclude that it is only in regards to his cognitive impairment that Petitioner has met his burden of proving that the preponderance of the evidence demonstrates that his condition was caused by his work-related carbon monoxide exposure. Therefore, I conclude that Petitioner has prevailed in his claim for occupational disease benefits and medical benefits only so far as his cognitive impairment is concerned.

¶ 94 As the prevailing party, Petitioner is entitled to his costs.[182] As to the issue of attorney fees, pursuant to § 39-71-611, MCA, an insurer shall pay reasonable attorney fees if the insurer denies liability for a claim for compensation, the claim is later adjudged compensable by this Court, and this Court determines the insurer's actions in denying liability were unreasonable. In the present case, although Petitioner has prevailed at least in part on his occupational disease claim, I do not find Respondent to have been unreasonable in denying liability given the conflicting medical opinions and the complexity

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[181] *Foster v. Montana Schools Group Insurance Authority*, 2007 MTWCC 18, ¶ 34 (*citing Hash v. Montana Silversmith*, 256 Mont. 252, 257, 846 P.2d 981, 983 (1993). (Citations omitted.)

[182] *Marcott v. Louisiana Pac. Corp.*, 1994 MTWCC 109 (*aff'd after remand at* 1996 MTWCC 33).

of this case with respect to causation.

¶ 95 Similarly, pursuant to § 39-71-2907, MCA, I may increase by 20% the full amount of benefits due a claimant during the period of delay or refusal to pay if the insurer's delay or refusal to pay is unreasonable. As I have not found Respondent's refusal to pay benefits to have been unreasonable under the facts of this case, Petitioner is not entitled to a penalty under § 39-71-2907, MCA.

## JUDGMENT

¶ 96 Respondent is liable for Petitioner's occupational disease claim for his cognitive impairment and for paying occupational disease medical benefits and indemnity benefits.

¶ 97 Petitioner is entitled to his costs.

¶ 98 Petitioner is not entitled to his attorney fees pursuant to § 39-71-611, MCA.

¶ 99 Petitioner is not entitled to a 20% penalty pursuant to § 39-71-2907, MCA.

¶ 100 Pursuant to ARM 24.5.348(2), this JUDGMENT is certified as final and, for purposes of appeal, shall be considered as a notice of entry of judgment.

¶ 101 Any party to this dispute may have twenty days in which to request reconsideration from these FINDINGS OF FACT, CONCLUSIONS OF LAW AND JUDGMENT.

DATED in Helena, Montana, this 11th day of July, 2008.

(SEAL)

/s/ JAMES JEREMIAH SHEA
JUDGE

c: James G. Edmiston
Leo S. Ward
Submitted: February 12, 2007