ALASKA WORKERS' COMPENSATION BOARD

P.O. Box 115512 **Juneau, Alaska 99811-5512**

DONNA PENNINGTON, Employee, Applicant, v. STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY, Self-Insured Employer, Defendant.	FINAL DECISION AND ORDER AWCB Case No. 199430290 AWCB Decision No. 13-0117 Filed with AWCB Fairbanks, Alaska on September 25, 2013

Donna Pennington's (Employee) March 23, 2012 workers' compensation claim was heard on August 22, 2013, in Fairbanks, Alaska. The matter was set for hearing on February 13, 2013. Employee appeared in person, represented herself and testified. Attorney David Rhodes appeared and represented the State of Alaska, Department of Natural Resources (Employer). Environmental Program Specialist Guy Warren and Alan Goldman, M.D. testified telephonically. The record closed at the conclusion of the hearing, on August 22, 2013.

ISSUES

Employee contends she was exposed to toxic chemicals while working as a firefighter for Employer in 1994. Employee further contends this toxic exposure is a substantial factor in causing her multiple sclerosis (MS). Employee seeks permanent partial impairment (PPI) benefits, medical benefits, transportation costs, compensation rate adjustment, and reimbursement to the Department of Veterans Affairs (VA).

Employer concedes Employee suffers from MS and requires ongoing medical care for that condition. However, Employer contends Employee was not exposed to any toxic chemical while working as a firefighter, nor is any chemical exposure a substantial factor in causing Employee's MS, need for medical treatment or ongoing disability.

1) ***Was Employee exposed to toxic chemicals while working as a firefighter for Employer?***

2) ***If so, was the toxic exposure a substantial factor in causing Employee's MS, need for medical treatment and ongoing disability?***

FINDINGS OF FACT

A review of the record establishes the following facts and factual conclusions by a preponderance of the evidence:

1) On November 30, 1979, R. W. Gutmann of the U.S. General Accounting Office, Logistics and Communications Division, sent a letter to the Secretary of the Army reporting the results of an investigation into the existence of residual chemical and/or biological warfare agents at the Fort Greely Gerstle River Test Center, a testing ground for chemical weapons in the 1950s and 1960s:

> We have completed a survey on reported chemical and biological contamination at the Fort Greely Gerstle River Test Center. The enclosure provides details of our findings. The results of our survey show that the Army cannot certify that the land has been decontaminated and available for other uses because essential records which provide details on the tests are not available. The Army declared the land excess to its needs in 1972, and in January 1979 the land was removed from the excess status because the Army could not certify that the land was free of contamination. In view of the above situation and to insure the safety of both military and civilian personnel and the general public from accidental exposure, we are recommending that you direct the following actions:
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> > -- Require tests to insure that all debris buried in the pits at Gerstle is in fact neutralized and that no contamination has spread from the confines of the pit areas. If contamination is found, direct all contaminated areas be exhumed and the contents decontaminated again.
> >
> > -- Require that emergency treatment equipment be maintained at the Gerstle Test Center and that the Center's permanent personnel be trained in its use. The quantity of supplies should be sufficient to treat the maximum number of

> personnel which could be exposed to chemical or biological contamination at any time.
>
> -- Insure that lands used for chemical and biological testing are not returned to the public domain without first having been decontaminated and a clearance certificate provided.
>
> -- Determine which lands returned to the public domain were used for such tests and if these lands were not verified as being free of contamination, take all steps necessary to decontaminate the land and prepare the proper certification….

(R. W. Gutmann letter to Secretary C. Alexander, November 30, 1979).

2) Enclosed with the letter to the Secretary of the Army was a report entitled "Fort Greely Gerstle River Chemical and Biological Warfare Testing." It read in part:

> BACKGROUND
>
> Chemical and biological warfare testing occurred on Alaska land withdrawn by Public Land Order 910, August 7, 1953. This order withdrew 20,000 acres… from the public domain. The area is known as the Gerstle River Test Center. Chemical and biological testing continued there until the late 1960s at which time the Center fell into disuse and remained in a caretaker status until 1978. Agents tests included chemical nerve agents VX and GB, HD (Mustard gas), and the biological agent Tularemia. Since the records were inadequate, we cannot say that these agents were the only ones tested….
>
> LACK OF DECONTAMINATION CERTIFICATION
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> The Army cannot certify that the Center is free from contamination in accordance with Army Regulation 405-90. The Bureau of Land Management and the General Services Administration refuse to accept land that has any contamination. The Commander of the Cold Regions Test Center (CRTC), landlord for the Center, believes the land to be virtually free from contamination. However, records of the testing periods from 1953 to 1964 are incomplete and subsequent records are poor, so there is a chance that contaminated areas may exist. The Commander will not sign a clearance certificate and claims that it would take a team of 10 people with mine detectors from 128 to 129 years to certify the Center free of contamination in accordance with Army field manual instructions. This would cover only areas accessible on foot. The Center has bog conditions which cannot be surveyed on foot.
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> …
>
> PRESENT USE
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> The Commander of CRTC is not convinced that all contamination has been found because of the lack of records mentioned above. However, he is sure that trafficable areas are clear, and he is using the area for nonchemical/biological tests….

> CONCLUSIONS
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> If canisters of a chemical agent should surface, decontamination gear and treatment are not available at the center. However, they are available at Fort Greely, a 15-minute helicopter ride from the Center. Equipment at Fort Greely may be of little help to anyone exposed to chemical agents at the Center because, depending on how the agent enters the body, a person can die within 5 minutes.
>
> No tests have been performed at the disposal sites to insure that they are completely decontaminated.

(Fort Greely Gerstle River Chemical and Biological Warfare Testing Report, undated).

3) On January 10, 1994, Employee sought treatment at the Tok Clinic for a splinter in her right hand. She complained of pain at the splinter site and tingling with movement. (Tok Clinic chart notes, January 10, 1994).

4) On January 12, 1994, Employee returned to the Tok Clinic for a follow-up appointment. She complained of "numbness to #2 finger" in her right hand. (Tok Clinic chart notes, January 12, 1994).

5) From June 14, 1994 to June 18, 1994, Employee worked on a firefighting crew on the Hajdukovich Creek Fire near the Fort Greely Military Reservation. The fire extended into the Gerstle River Expansion Area. Within the Gerstle River Expansion Area lies the Gerstle River Test Site. (Employee time report, DNR Hajdukovich Creek Fire Report, Employer's Documentary Evidence, filed August 1, 2013).

6) On June 17, 1994, Mike Silva of the Bureau of Land Management (BLM) Alaska Fire Service sent a memo to Al Edgren:

> Please pull all personnel and equipment from the portion of this fire located in the Gerstle River Test Site. You are not authorized to leave any personnel or [illegible] any personnel into this area until further notice. This includes not doing any fireline rehabilitation.
>
> I would like to develop a contingency plan for when this fire escapes the present [illegible] and burns off the Gerstle River Test Site. Skip Theisan will represent me and will be in contact with your or your representative.
>
> The hazardous materials specialist for the BLM Alaska Fire Service is looking into our concerns about the potential of hazardous materials on this site and the potential threat to personnel.

(M. Silva memo to A. Edgren, June 17, 1994).

7) On June 30, 1994, Fire Operations Forester Joe Stam sent a memo to Fire Management Chief Frenchie Malotte:

> There has been quite a bit of controversy concerning the safety of suppression personnel while working on fire #412312 which fails (sic) in the Gerstle River Test Area. The Test Area is approximately 20,000 acres of federal land located near Ft. Greely which was used as a test site for biological and other types of chemical weapons agents. There is also an expansion area of approximately 60,000 acres which is state land. These are as were supposed to have been "cleaned" by the military but no one is willing to certify whether or not they are safe to enter. Background information concerning the site and expansion area are enclosed.
>
> The federal government has decided the two areas are too hazardous or suspect for their employees to enter. Mile Silva of the Alaska Fire Service wrote a memo (copy attached) ordering all personnel to stay out of the test area until it is deemed safe to enter. The 60,000 acre expansion area has also been declared unsafe and no federal personnel are allowed on it as well. I have instructed Northern Zone to advise Delta Area not to allow any suppression forces into the test area or the expansion area until the Department of Environmental Conservation or the military can certify them safe to work in.

(J. Stam memo to F. Malotte, June 30, 1994)(emphasis in original).

8) On July 8, 1994, DNR Regional Forester Les Fortune sent a memo to Area Forester Al Edgren:

> I have reviewed several documents related to prior use of the Expansion Area by the military. It appears there is a low probability of hazard but it is not possible, from reading this material, to conclude that no dangerous material exists on the site. Based on this information, the following procedures should be followed:
>
> 1. The developed areas (private lands) should continue to receive aggressive protection form wildfire. This is no change from current standards.
>
> 2. The remainder of the Expansion Area, much of which is modified, should be limited to the use of aerial suppression techniques and equipment.
>
> Based on the information I have reviewed, it does not appear that normal activities on these lands should present any unusual hazards. The Expansion Area was classified in one report indicating the military suspected materials had been buried during testing activities and in fact some areas were excavated and items disposed of during earlier cleanup operations in the area. Employees and contractors should be made aware that these lands were part of the military test site. If military type items or containers are found, I would recommend that they be left in place and the

> Department of Environmental Conservation be contacted to determine if any hazardous material or residue is present.

(L. Fortune memo to A. Edgren, July 8, 1994).

9) On August 4, 1994, a Report of Occupational Injury or Illness was filed on Employee's behalf. While the signature is illegible, the individual who filed the report was identified as a "Delta Area Forester." The report indicated Employee had

> [d]irect/indirect exposure to smoke and/or on-the-ground exposure to biological and chemical agents used at the Gerstle River Test Site and Expansion Area, to include nerve agents and mustard gas compounds. Information was declassified by the military on 07/13/94. Reference materials include US Army Corps of Engineers "Archives Search Report" and Summary, dated June 1994.

The report stated Employee had suffered "no immediate injury or health effect." (Report of Occupational Injury or Illness, August 4, 1994).

10) On July 26, 1999, Employee reported to Winifred Haimes, RN at the Alaska VA Health Center her "#4 and #5 fingers" on the right hand and her right foot had been "tingling and going numb." Employee requested a neurological referral. (RN Haimes report, July 26, 1999).

11) On April 26, 2000, Employee saw Jean Anderson, ANP at the Alaska VA Health Center. ANP Anderson noted Employee had experienced "intermittent numbness R 4, 5 digits radiating up ulnar area x 10+ years." (ANP Anderson chart notes, April 26, 2000).

12) On June 15, 2011, Employee was treated at the Fairbanks Memorial Hospital emergency department for headaches and "possible meningitis." A CT scan of the brain showed a white matter lesion suggesting "infection or demyelinating disease i.e. MS." (FMH ER report, June 15, 2011).

13) On July 8, 2011, Employee underwent a brain MRI, which showed "multiple regions of abnormal signal intensity with the white matter consistent with demyelinating process." (MRI report, July 8, 2011).

14) On January 16, 2012, Janice Onorato, MD performed a neurological evaluation. Dr. Onorato noted no evidence of neurological abnormality upon examination, but the brain MRI was "highly suggestive of a primary demyelinating disease, such as multiple sclerosis." Dr. Onorato recommended routing MRIs to track evidence of new lesions or enhancing lesions. (Dr. Onorato report, January 16, 2012).

15) On March 6, 2012, Employee underwent a second brain MRI. There was no significant change compared to the July 8, 2011, but the imaging was noted to be "compatible with the patient's diagnosis of multiple sclerosis." (MRI report, March 6, 2012).

16) On March 12, 2012, Employee saw Dr. Onorato for a follow-up. Employee complained of increased leg weakness, vertigo, motion sickness, and headaches. Based on Employee's reported symptoms and the abnormal MRI, Dr. Onorato diagnosed MS and prescribed daily injections of Copaxone. (Dr. Onorato report, March 12, 2012).

17) On March 29, 2012, Employee filed a workers' compensation claim (WCC) alleging she was "exposed to biological and chemical agents used at Gerstle River Test Site and Expansion Area." Employee sought PPI benefits, medical costs, transportation costs, compensation rate adjustment, and reimbursement to the VA. (WCC, March 28, 2012).

18) On April 25, 2012, Employer filed its answer to Employee's WCC, denying all benefits. (Answer, April 23, 2012).

19) On June 8, 2012, Employer filed a controversion notice, denying all benefits. Employer stated: "The Employee's claim presents a complex medical issue. The Employee has not presented any medical evidence to the Employer and has failed to raise the presumption with respect to her allged (sic) condition having been caused by an alleged workplace exposure." (Controversion Notice, June 6, 2012).

20) On August 9, 2012, Employer sent a letter to Dr. Onorato, requesting her opinion on Employee's diagnosis, causes of MS, and whether Employee's alleged chemical exposure was a substantial factor in the development or aggravation of Employee's MS. In her hand-written response to the questions, Dr. Onorato stated Employee's diagnosis is MS and there is no known cause for MS. In response to Employer's question concerning causation, Dr. Onorato responded "no opinion." (Dr. Onorato hand-written response to D. Rhodes, Ex. A to ER's Hearing Brief).

21) On December 26, 2012, neurologist Alan Goldman, MD performed a medical file review at Employer's request. Dr. Goldman noted there was no objective evidence Employee had been exposed to biological and/or chemical agents:

> [Mustard gas, sarin gas, and VX gas] are extremely toxic and lethal. Both sarin gas and VX gas cause almost instantaneous damage/blockade to the neuroproteins that break down and block the transmission of nervous tissue impulses. Almost all patients exposed to these two gases die almost immediately of asphyxiation because of their loss of their muscular ability to breathe. Obviously, this has not been the case with Ms. Pennington.

> Mustard gas exposure causes wide spread, extreme vesicular skin lesions/blisters, not only on the exposed skin but also in the lungs. A very high incidence of death also occurs in these individuals after exposure to this agent and the resultant superficial skin and internal organ burns caused by that exposure. The pulmonary system seems to be very frequently affected. Mustard gas exposure can also cause extreme pain, such as occurs with any other burns. There is no objective medical evidence of Ms. Pennington having had any symptoms suggesting of mustard gas exposure.

Dr. Goldman agreed with Dr. Onorato's MS diagnosis and her opinion there is no known cause of MS. Dr. Goldman reported the current theory, though not proven, is that MS is a "disorder of altered immunological response to some type of initial external antigenic agent," "probably a virus," to which patients are exposed at an early age, often pre-pubescent. Dr. Goldman opined Employee's alleged exposure to mustard gas, sarin gas, VX gas, or any other toxin, is not a substantial factor in Employee developing MS or in her current need for treatment. (Dr. Goldman EME report, December 26, 2012).

22) Employee testified about her work for Employer, her belief she was exposed to toxic chemicals while working for Employer, and her development of and treatment for MS. While working as a firefighter on the Hajdukavich Creek Fire near Delta Junction, Employee and her aunt Dorothy Patrick became "violently ill, throwing up" and sought medical attention. She was "all over the fire," "digging through ashes," and "breathing burning particulate matter." She believes she was exposed by toxic gas in the air. Employee later learned "they removed all the firefighters from the area" as a precautionary measure. The "powers that be" told her there were "burning agents" in the area, and the firefighters were demobilized. Employee testified she first had numbness in her hand in July 1994, and that the neurological symptoms "began immediately" after she became ill working on the fire. (Employee).

23) Employee believes she was exposed to Agent Orange, mustard gas and ricin. Employee, who is half-Eskimo, believes her MS was caused by exposure to a toxin because "Eskimos do not get MS." *(Id.)*

24) When asked about her hand numbness documented in January 1994, before the fire, Employee acknowledged she had hand numbness, "but I never dropped a cup of coffee until after the exposure." *(Id.)*

25) When asked if any other firefighters were exposed to chemical agents, Employee named her aunt, Dorothy Parker, who has since died of liver cancer, and stated "the guy holding the water buckets had blisters on his hands." *(Id.)*

26) Employee admitted she has no medical evidence linking her alleged toxic exposure to her MS. *(Id.)*

27) Guy Warren, Environmental Program Specialist for the Alaska Department of Environmental Conservation (DEC), credibly testified about his work for the state managing the clean-up efforts and data collection and analysis for the Gerstle River Expansion Area and Test Site. In assessing the threat of possible exposure to the public, the DEC determines whether three potential threats exist: 1) chemical weapon materials (CWM), the containers for the agent; 2) chemical warfare agents, the actual toxic substances; and 3) agent break-down products, chemical bi-products produced when the agents deteriorate. Warren testified it typically takes six months to one year for the agents, once exposed to the air, to break down into non-toxic materials. (Warren).

28) The military ceased chemical and biological weapons testing at the Gerstle River Test Site in 1964. Within two years, the military collected all existing debris in the test site, piled it into four pits and burned it. In the early 1980s, the military excavated the disposal pits and consolidated the debris into one pit on the test site. While the soil sampling done at the time was minimal, the results were negative for toxic agents. In the early 1990s, the Army Corps of Engineers "took another look" at the expansion area and test site records and identified two missile rounds fired into the test grid labeled "unknown." Military personnel were concerned there may be unexploded missiles on the test grid and opened an investigation. The original army personnel who conducted the testing were interviewed and clarified there was so much damage in the test grid that two missiles detonated but they could not verify exactly where in the grid they exploded. They were noted in the logbook as "unknown" because the exact location of detonation could not be verified. In the course of that investigation, 5,000 individual soil samples were taken and were negative for any toxic agent. Warren believes it is highly unlikely there are undetonated weapons on the test site or that anyone has suffered any toxic exposure since "at least 1970." While neither the DEC nor the military have investigated "every square foot" of the 100,000 acre expansion area, Warren is confident there are no longer any toxic agents on the site, nor were there any in 1994. Warren conceded the heat and pressure caused by a forest fire would certainly be sufficient to detonate an unexploded missile, if one existed, causing toxic gas to be released into the air. *(Id.)*

29) Dr. Goldman credibly testified about the diagnosis and treatment of MS and his records review in Employee's case. Of the many patients with neurological disorders Dr. Goldman treats, the majority have MS. MS is an auto-immune disorder where the body's antibodies attack the central nervous system. While there is no accepted cause of MS, the current theory is that it is initiated by early exposure to an external source, most likely a virus, possibly the Epstein-Barr virus. Eighty percent of the world population has been exposed to the Epstein-Barr virus. Symptoms of MS include vision problems, numbness, fatigue, nausea, tingling in the extremities, and poor coordination. There is no known causative link between possible exposure to toxic chemicals and development of MS. Dr. Goldman noted there is no mention of any toxic exposure in any of Employee's medical records, nor is there any history of symptoms consistent with mustard gas or VX gas exposure. Dr. Goldman reiterated his opinion Employee's alleged exposure to chemical weapons is not a substantial factor in her development of MS or her current need for treatment. (Dr. Goldman).

PRINCIPLES OF LAW

> **AS 23.30.001. Intent of the legislature and construction of chapter**. It is the intent of the legislature that
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> 1) this chapter be interpreted so as to ensure the quick, efficient, fair, and predictable delivery of indemnity and medical benefits to injured workers at a reasonable cost to the employers who are subject to the provisions of this chapter….

The board may base its decision not only on direct testimony, medical findings, and other tangible evidence, but also on the board's "experience, judgment, observations, unique or peculiar facts of the case, and inferences drawn from all of the above." *Fairbanks North Star Borough v. Rogers & Babler,* 747 P.2d 528, 533-34 (Alaska 1987).

> **AS 23.30.010. Coverage.**
> Except as provided in (b) of this section, compensation or benefits are payable under this chapter for disability or death or the need for medical treatment of an employee if the disability or death of the employee or the employee's need for medical treatment arose out of and in the course of the employment. To establish a presumption under AS 23.30.120(a)(1) that the disability or death or the need for medical treatment arose out of and in the course of the employment, the

> employee must establish a causal link between the employment and the disability or death or the need for medical treatment. A presumption may be rebutted by a demonstration of substantial evidence that the death or disability or the need for medical treatment did not arise out of and in the course of the employment. When determining whether or not the death or disability or need for medical treatment arose out of and in the course of the employment, the board must evaluate the relative contribution of different causes of the disability or death or the need for medical treatment. Compensation or benefits under this chapter are payable for the disability or death or the need for medical treatment if, in relation to other causes, the employment is the substantial cause of the disability or death or need for medical treatment.
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> **AS 23.30.045. Employer's liability for compensation.**
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> (a) An employer is liable for and shall secure the payment to employees of the compensation payable under AS 23.30.041, 23.30.050, 23.30.095, 23.30.145, and 23.30.180 - 23.30.215….
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> **AS 23.30.095. Medical treatments, services, and examinations.**
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> (a) The employer shall furnish medical, surgical, and other attendance or treatment, nurse and hospital service, medicine, crutches, and apparatus for the period which the nature of the injury or the process of recovery requires, not exceeding two years from and after the date of injury to the employee. However, if the condition requiring the treatment, apparatus, or medicine is a latent one, the two-year period runs from the time the employee has knowledge of the nature of the employee's disability and its relationship to the employment and after disablement. It shall be additionally provided that, if continued treatment or care or both beyond the two-year period is indicated, the injured employee has the right of review by the board. The board may authorize continued treatment or care or both as the process of recovery may require….

Under the Act, an employer shall furnish an employee injured at work any medical treatment "which the nature of the injury or process of recovery requires" within the first two years of the injury. The medical treatment must be "reasonable and necessitated" by the work-related injury. Thus, when the board reviews an injured employee's claim for medical treatment made within two years of an indisputably work-related injury, "its review is limited to whether the treatment sought is reasonable and necessary." *Philip Weidner & Associates v. Hibdon*, 989 P.2d 727, 731 (Alaska 1999).

AS 23.30.095(a) requires employers to pay for treatment necessitated by the nature of injury or the process of recovery up to two years after the injury date. After two years the board may authorize treatment necessary for the process of recovery or to prevent disability. In *Hibdon*, the Alaska Supreme Court noted "when the Board reviews a claim for continued treatment beyond two years from the date of injury, it has discretion to authorize 'indicated' medical treatment 'as the process of recovery may require.'" *Id.*, citing *Municipality of Anchorage v. Carter*, 818 P.2d 661, 664 (Alaska 1991). "If the treatment is necessary to prevent the deterioration of the patient's condition and allow his continuing employment, it is compensable within the meaning of the statute." *Leen v. R.J. Reynolds Co.,* AWCB Dec. No. 98-0243 (September 23, 1998); *Wild v. Cook Inlet Pipeline*, 3AN-80-8083 (Alaska Super. Ct. Jan. 17, 1983); *see accord Dorman v. State*, 3AN-83-551 at 9 (Alaska Super. Ct., February 22, 1984).

> **AS 23.30.120. Presumptions.**
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> (a) In a proceeding for the enforcement of a claim for compensation under this chapter it is presumed, in the absence of substantial evidence to the contrary, that
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> > (1) the claim comes within the provisions of this chapter….

Under AS 23.30.120, an injured worker is afforded a presumption the benefits he or she seeks are compensable. The Alaska Supreme Court held the presumption of compensability is applicable to any claim for compensation under the workers' compensation statute, and applies to claims for medical benefits and continuing care. *Meek v. Unocal Corp*., 914 P.2d 1276, 1279 (Alaska 1996); *Municipality of Anchorage v. Carter*, 818 P.2d 661, 664-665 (Alaska 1991). An employee is entitled to the presumption of compensability as to each evidentiary question. *Sokolowski v. Best Western Golden Lion Hotel*, 813 P.2d 286, 292 (Alaska 1991).

Application of the presumption to determine the compensability of a claim for benefits involves a three-step analysis. *Louisiana Pacific Corp. v. Koons*, 816 P.2d 1379, 1381 (Alaska 1991). First, the claimant must adduce "some" "minimal," relevant evidence establishing a "preliminary link" between the disability and employment, or between a work-related injury and the existence of disability, to support the claim. *Cheeks v. Wismer & Becker/G.S. Atkinson, J.V.,* 742 P.2d 239,

244 (Alaska 1987). The evidence necessary to raise the presumption of compensability varies depending on the claim. In claims based on highly technical medical considerations, medical evidence is often necessary to make that connection. *Burgess Construction Co. v. Smallwood*, 623 P.2d 312, 316 (Alaska 1981). In less complex cases, lay evidence may be sufficiently probative to establish causation. *VECO, Inc. v. Wolfer*, 693 P.2d 865, 871 (Alaska 1985). The presumption of compensability continues during the course of the claimant's recovery from the injury and disability. *Olson v. AIC/Martin J.V.*, 818 P.2d 669, 675 (Alaska 1991). Witness credibility is not weighed at this stage in the analysis. *Resler v. Universal Services Inc.*, 778 P.2d 1146, 1148-49 (Alaska 1989). If there is such relevant evidence at this threshold step, the presumption attaches to the claim. If the presumption is raised and not rebutted, the claimant need produce no further evidence and the claimant prevails solely on the raised but un-rebutted presumption. *Williams v. State*, 938 P.2d 1065 (Alaska 1997).

"Substantial evidence" is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Tolbert v. Alascom, Inc.*, 973 P.2d 603, 611-612 (Alaska 1999).

Since the presumption shifts only the burden of production and not the burden of persuasion, the employer's evidence is viewed in isolation, without regard to any evidence presented by the claimant. *Williams,* at 1055. Credibility questions and weight to give the employer's evidence are deferred until after it is decided if the employer has produced a sufficient quantum of evidence to rebut the presumption the claimant is entitled to the relief sought. *Norcon, Inc. v. Alaska Workers' Comp. Bd.*, 880 P.2d 1051 (Alaska 1994); *Wolfer*, 693 P.2d at 869.

For work injuries occurring before the 2005 amendments to the Act to be compensable, employment needed to be "a substantial factor" in bringing about the disability or need for medical care. *Powell v. North Country Constr.,* AWCAC Decision No. 187, at 4 (August 23, 2013)(citation omitted). A work injury is a substantial factor in bringing about the need for medical care if the need would not have arisen at the same time, in the same way, or to the same degree but for the work injury. *Powell,* at 4.

> **AS 23.30.122. Credibility of witnesses.** The board has the sole power to determine the credibility of a witness. A finding by the board concerning the

> weight to be accorded a witness's testimony, including medical testimony and reports, is conclusive even if the evidence is conflicting or susceptible to contrary conclusions. The findings of the board are subject to the same standard of review as a jury's finding in a civil action.

ANALYSIS

Was Employee exposed to toxic chemicals while working as a firefighter for Employer?

This is a factual question to which the presumption of compensability applies. Employee raised the presumption she was exposed to toxic chemicals with her testimony she became "violently ill" while working as a firefighter on the Hajdukovich Creek Fire and with the report of occupational injury or illness filed by a "Delta Area Forester" stating Employee suffered "[d]irect/indirect exposure to smoke and/or on-the-ground exposure to biological and chemical agents used at the Gerstle River Test Site and Expansion Area, to include nerve agents and mustard gas compounds."

Employer rebutted the presumption of compensability with Guy Warren's testimony and documentary evidence concerning the Gerstle River Test Site clean-up and investigation.

On the third step in the presumption analysis, Employee cannot prove by a preponderance of the evidence she was exposed to mustard gas, VX, or any other toxin during her work for Employer in June 1994.

There is no doubt the military conducted extensive chemical and biological weapons testing at the Gerstle River Expansion Area in the 1960s. Military records documenting the testing and clean-up efforts are "ambiguous at best," and Employee's fears of possible exposure are certainly understandable. However, fear and speculation of exposure is not substantial evidence to support a factual finding. Employee's sole evidence she was exposed to chemical toxins was that she became "violently ill, throwing up" while working on the Hajdukovich Creek Fire and that a report of injury was filed on her behalf alleging possible exposure to smoke or on-the-ground exposure to biological and chemical agents. While the panel does not doubt Employee's testimony she became ill while working on the fire, there are no medical records documenting

Employee suffered skin lesions, burns, or pulmonary issues, symptoms common in patients exposed to chemical nerve agents.

As for the report of injury, it is most likely DNR filed the report as a precautionary measure when concerns first arose about possibly undetonated chemical weapons at the fire site. As Guy Warren testified, and as evidenced in the record, DNR demobilized the firefighter crew on June 17, 1994 because neither the military nor DNR could certify the Gerstle River Testing Site was free of chemical weapons. Of specific concern was a notation in a testing logbook identifying two chemical missiles as "unknown." A thorough investigation ensued, and the original army personnel who conducted the testing were interviewed. They clarified there was so much damage in the testing grid that two missiles detonated but they could not verify exactly where in the grid they exploded. They were noted in the logbook as "unknown" because the exact location of detonation could not be verified. In the course of the investigation, 5,000 individual soil samples were taken and were negative for any toxic agent. Warren credibly testified he believes it is highly unlikely there are undetonated weapons on the test site or that anyone has suffered any toxic exposure since "at least 1970." The chemical agents tested in the early 1960s would have broken down into non-harmful substances within at most one year from the time they were detonated. While neither the DEC nor the military have investigated "every square foot" of the 100,000 acre expansion area, Warren is confident there are no longer any toxic agents on the site, nor were there any in 1994.

The overwhelming evidence in the record and presented at hearing supports a finding Employee was not exposed to any toxin while working on the Hajdukovich Creek Fire in June 1994.

If Employee was exposed to toxic chemicals while working for Employer, was the toxic exposure a substantial factor in causing Employee's MS, need for medical treatment and ongoing disability?

As discussed above, Employee has not proven by a preponderance of the evidence she was exposed to toxic chemicals while working for Employer. However, assuming she had proved she suffered chemical exposure, the question turns to whether that exposure was a substantial factor in Employee developing MS, in Employee's need for medical treatment, and her ongoing disability. These are factual questions to which the presumption of compensability applies. To

benefit from the presumption of compensability, an employee must demonstrate a preliminary link between the work injury and the benefits she seeks. As this case involves complex medical issues, Employee must present medical evidence supporting the connection between her work for Employer and her illness. Here, there is no medical evidence linking Employee's alleged toxic exposure to her neurological symptoms or development of MS. Employee has failed to raise the presumption her disability and need for medical treatment is related to her work for Employer.

However, considering in the alternative Employee's testimony her neurological symptoms began immediately after working on the Hajdukovich Creek Fire in 1994 is minimally sufficient to establish a preliminary link to attach the presumption of compensability, at the second stage of the analysis Employer is able to rebut the presumption with Dr. Goldman's report and testimony and Guy Warren's testimony.

Because Employee's alleged exposure occurred prior to the 2005 amendments to the Act, Employee must show her employment was "a substantial factor" in bringing about her disability or need for medical care. A work injury is a substantial factor in bringing about the need for medical care if the need would not have arisen at the same time, in the same way, or to the same degree but for the work injury. Employee must therefore prove by a preponderance of the evidence but for her 1994 toxic exposure while working for Employer, her need for treatment for MS would not have arisen at the same time, in the same way or to the same degree.

Employee testified she began having numbness and tingling in her hand immediately after working on the Hajdukovich Creek Fire. However, when asked about her hand numbness documented in January 1994, before the fire, Employee acknowledged she had hand numbness, "but I never dropped a cup of coffee until after the exposure." Further, ANP Anderson noted in April 2000 Employee had experienced "intermittent numbness" in her right hand for more than ten years. Certainly Employee's neurological symptoms increased over the years, but there is no evidence in the record the disease process was hastened or aggravated by Employee's work for Employer. Employee concedes she has no medical evidence causally linking her MS to the alleged toxic exposure. Dr. Onorato and Dr. Goldman opined there is no known cause for MS. Dr. Goldman testified the current theory, though not proven, is that MS develops as a reaction to

exposure to a virus, possibly the Epstein-Barr virus. In any event, Dr. Goldman unequivocally stated Dr. Employee's alleged exposure to chemical weapons is not a substantial factor in her development of MS or her current need for treatment.

Employee has failed to prove by a preponderance of the evidence her alleged toxic exposure is a substantial factor in her development of MS, need for medical treatment and ongoing disability are not causally related to her employment with Employer. Her claim for benefits will be denied.

CONCLUSIONS OF LAW

1) Employee was not exposed to toxic chemicals while working as a firefighter for Employer.

2) Even if Employee had proved she was exposed to toxic chemicals while working as a firefighter for Employer, the toxic exposure was not a substantial factor in causing Employee's MS, need for medical treatment or ongoing disability.

ORDER

Employee's March 23, 2012 claim is denied.

Dated at Fairbanks, Alaska on September 25, 2013.

ALASKA WORKERS' COMPENSATION BOARD

/s/____________________________________
Amanda Eklund,
Designated Chair

/s/____________________________________
Krista Lord, Member

/s/____________________________________
Zebulon Woodman, Member

APPEAL PROCEDURES

This compensation order is a final decision and becomes effective when filed in the board's office, unless it is appealed. Any party in interest may file an appeal with the Alaska Workers' Compensation Appeals Commission within 30 days of the date this decision is filed. All parties before the board are parties to an appeal. If a request for reconsideration of this final decision is timely filed with the board, any proceedings to appeal must be instituted within 30 days after the reconsideration decision is mailed to the parties or within 30 days after the date the reconsideration request is considered denied because the board takes no action on reconsideration, whichever is earlier.

A party may appeal by filing with the Alaska Workers' Compensation Appeals Commission: (1) a signed notice of appeal specifying the board order appealed from; 2) a statement of the grounds for the appeal; and 3) proof of service of the notice and statement of grounds for appeal upon the Director of the Alaska Workers' Compensation Division and all parties. Any party may cross-appeal by filing with the Alaska Workers' Compensation Appeals Commission a signed notice of cross-appeal within 30 days after the board decision is filed or within 15 days after service of a notice of appeal, whichever is later. The notice of cross-appeal shall specify the board order appealed from and the grounds upon which the cross-appeal is taken. Whether appealing or cross-appealing, parties must meet all requirements of 8 AAC 57.070.

RECONSIDERATION

A party may ask the board to reconsider this decision by filing a petition for reconsideration under AS 44.62.540 and in accordance with 8 AAC 45.050. The petition requesting reconsideration must be filed with the board within 15 days after delivery or mailing of this decision.

MODIFICATION

Within one year after the rejection of a claim, or within one year after the last payment of benefits under AS 23.30.180, 23.30.185, 23.30.190, 23.30.200, or 23.30.215, a party may ask the board to

modify this decision under AS 23.30.130 by filing a petition in accordance with 8 AAC 45.150 and 8 AAC 45.050.

CERTIFICATION

I hereby certify the foregoing is a full, true and correct copy of the Final Decision and Order in the matter of DONNA PENNINGTON, employee v. STATE OF ALASKA, DNR, self-insured employer; Case No. 199430290; dated and filed in the office of the Alaska Workers' Compensation Board in Fairbanks, Alaska, and served on the parties on September 25, 2013.

/s/

Nicole Hansen, Office Assistant II