

or aggravated by conditions of his federal employment. The employee worked as a welder for over 30 years at the employing establishment. The record reflects that he welded on Hydrazine, Flourine, N2O4, GN2, He and propane systems, as well as vacuum systems for Liquid Nitrogen and Liquid Oxygen. While welding, the employee breathed fumes from flux core rods and from surfaces being welded. The record reflects that some welds were done over painted areas. The employee was not provided with an air-ventilated helmet, although fume hoods were introduced in approximately 1992 to reduce the inhalation of gases. He also worked inside chambers that had been used to store liquid propellant and he welded carbon steel, stainless steel, aluminum, cast iron and Inconel, a nickel-chromium-iron alloy. The employee stopped working for the employing establishment in September 1994.¹ He also smoked one pack of cigarettes per day for 41 years, quitting in December 2002.

In a January 5, 2004 certificate of death, the certifying medical examiner, Dr. Ric Garrison, a Board-certified anatomic pathologist and clinical pathologist, listed the cause of death as lung cancer with metastasis to the neck.

In an August 20, 2003 report, Dr. Gerald Markovitz, Board-certified in pulmonary medicine and critical care, noted having examined the employee and reviewed his medical records. He stated that the employee worked with different metals as a welder and worked in a confined space. While the employee used a welding helmet, he was not provided with a respirator in “40 years as a welder.” The employee had related that he welded inside a fuel chamber, which while empty of fuel, contained residue that would heat up with welding and produce fumes. The employee alleged that he was in excellent health until September 2002 and exercised on a treadmill daily and had no breathing problems. Dr. Markovitz noted that in September 2002 the employee was assigned to a welding chamber that was open-ended, windy and 100 degrees. The employee related that he and a coworker developed a “hacking cough” and in January 2003, he was diagnosed with pneumonia, and then squamous cell lung cancer and given a year to live. Dr. Markovitz diagnosed metastatic squamous cell carcinoma, left total pneumonectomy, mild to moderate obstructive airway disease and moderate restrictive defect due to pneumonectomy. He opined that the “primary cause of [the employee’s] lung cancer was probably his tobacco use. However, cigarette smoking may act with other co-carcinogens.” Dr. Markovitz noted that, according to “Rosenstock’s textbook, the risk of lung cancer is increased among welders.” He opined that the “welding fumes are thought to act synergistically with the tobacco co-carcinogens.” Dr. Markovitz noted that there was a 20-year latency period for developing lung cancer related to cigarettes with asbestos exposure and opined that this type of latency period was probably true for welders. He noted that “[w]ith the knowledge that welders have an increased risk of cancer, it would be speculative to state that he would have developed lung cancer absent his occupation, despite his significant tobacco use.” Dr. Markovitz opined that the employee’s cancer should be considered an industrial injury.

¹ The Office accepted as factual that the employee’s private employment included working for Welder, Sverdup Technology from October 1994 through January 2003 performing similar work to his previous federal employment and also worked for a private company at the employing establishment after his retirement. The employee also performed work as a welding instructor at a community college from September 1975 through June 1982 and taught advanced welding.

In an October 20, 2004 statement, the employing establishment advised the Office that it did not have available information related to the employee's exposure to potentially harmful substances while employed.

On November 8, 2004 appellant's representative submitted statements from the employee's coworkers. In an October 26, 2004 statement, Clifton Long, a welder, indicated that from 1964 to 1994, the employee was exposed to fumes related to welding for an average of two to four hours per day. In an October 28, 2004 statement, Phillip Counts, a coworker, indicated that he had worked with the employee since 1980. He stated that appellant welded various types of processes that included TIG (Tungsten Inert Gas), Arc, Silver solder brazing, and lead soldering, as well as plasma coated components, plasma cutters and nonferrous metals. In an October 28, 2004 memorandum, Ed Patterson, a coworker, noted that the employee had welded on various types of metals. He also confirmed that the employee was exposed to gas hazards and fumes and indicated that fume hoods were implemented in 1992 to reduce the risk of inhalation factors.

On November 16, 2004 the Office requested that the Office medical adviser provide an opinion on causal relationship.

In a report dated November 30, 2004, the Office medical adviser stated that the employee's smoking history was sufficient to account for his lung cancer. He explained that, while it was known that welders had a greater risk for developing lung cancer, studies had not identified a clear etiological agent. The Office medical adviser opined that there was insufficient data to support a relationship between the employee's death from lung cancer and factors of his federal employment as a welder.

On December 7, 2004 the Office found that the report of the Office medical adviser created a conflict with the opinion of Dr. Markovitz. The issue was whether welding fumes acted synergistically with tobacco smoke to cause or contribute to the employee's lung cancer. On January 26, 2005 the Office referred the employee's records, together with a statement of accepted facts, and the medical record, to Dr. Donal F. Sweeney, Board-certified in internal medicine with a subspecialty in pulmonary disease. He was selected as an impartial medical specialist to resolve the conflict in opinion between Dr. Markovitz and the Office medical adviser.

In a February 14, 2005 report, Dr. Sweeney reviewed the employee's history of injury and treatment and noted that the primary carcinogens involved were from the long-standing history of cigarette smoking over at least a 40-year if not a 45-year period of time. "Cigarette smoke has been clearly identified as containing carcinogenic agents for lung cancer and indeed other cancers." He further indicated that cigarette smoke was "particularly bad because people directly inhale the smoke-bypassing the body's natural filter in the nasal tissues and takes the smoke directly into the lungs, as well as smoking during the waking hours on a continuous basis." Dr. Sweeney noted that, "If [the employee] had smoked but not welded, he would have developed carcinoma of the lung. Whereas, if he had welded and not smoked, he would not have developed carcinoma of the lung." He further opined that "to a lesser degree of medical probability, I would state that there is a five percent chance that the welding fumes may meet the

conditions of acceleration as defined in your definition page of an occupational act, exposure or occurrence that may have increased the speed of progression.”

By letter dated April 11, 2005, the Office requested that Dr. Sweeney clarify his report with regard to whether he was able to identify the physiological mechanism or process by which the employee’s exposure to welding fumes had accelerated his lung cancer. The Office requested an explanation pertaining to the process, and how, in his medical opinion, it had accelerated the lung cancer.

In a supplemental report dated April 24, 2005, Dr. Sweeney stated that the causation of the carcinoma was clearly the smoking history and, that absent smoking, the employee would not have developed lung cancer. He further advised that, “in medical terms, I do not know whether the welding fumes played any role in his development of carcinoma of the lung. If there was any role played, it was one of co-carcinogen, an aggravator or accelerator of the basic cause, that is, cigarette smoking.” Furthermore, he explained that it was “almost impossible to completely exclude this occupational exposure to welding fumes.”

By decision dated June 1, 2005, the Office denied appellant’s claim for benefits on the grounds that the weight of the medical opinion evidence, which rested with Dr. Sweeney, did not support that the employee’s death was causally related to his employment.

On November 14, 2005 appellant’s representative requested reconsideration and submitted additional evidence. He contended that Dr. Sweeney did not rule out that welding fumes affected appellant’s lung cancer. The additional evidence included materials on respiratory medicine, and articles related to the relationship of gene mutations and welding and lung cancer.

In a September 29, 2005 report, Dr. Markovitz provided further explanation to support his opinion that the employee’s lung cancer was linked to welding fumes. He explained that “welding fumes cause genetic mutations in the K-ras gene and that welding fumes cause a different type of genetic mutation in human lung cancer by welding fumes, compared to asbestos or compared to nonoccupational lung cancer (cigarette related).” Dr. Markovitz noted that this was a “known physiological process by which welding fumes cause lung cancer by genetic mutation.” He opined that the employee’s work activities as a welder exposed him to carcinogens that acted as a co-carcinogen in the development of his lung cancer and that there was a causal relationship between the specific and actual history of the employment conditions of the employee and his lung cancer.

By letter dated November 29, 2005, the Office requested that Dr. Sweeney review the September 29, 2005 report of Dr. Markovitz. The Office requested an opinion with regard to the cause of the employee’s carcinoma and its relation to the fact that the employee smoked for a long period of time, and an explanation regarding how he arrived at his opinion.

In a December 12, 2005 report, Dr. Sweeney addressed Dr. Markovitz’s report. He noted that he had performed a medical literature search regarding welding fumes and lung cancer. Dr. Sweeney stated that the employee always worked outside and not in enclosed spaces and that the “epidemiological evidence for welding is slightly suggestive but it is not backed up by a

broad consensus, as is the cigarette data.” Dr. Sweeney opined that welding fumes “possibly” might cause lung cancer by mutation. He conducted research to determine if there were any articles to support a specific cause concerning genetic mutations and lung cancer. However, Dr. Sweeney was unable to “locate any new medical data that would back up Dr. Markovitz’ statement in any way that welding fumes cause cellular genetic mutation in lung cancer.” Dr. Sweeney opined that Dr. Markovitz’ report was speculative and that he did not make a specific case as to how welding fumes may be involved. Dr. Sweeney stated that there was “no answer at this time” regarding the precise cause of the employee’s cancer. He reiterated that his opinion has not changed.

By decision dated January 10, 2006, the Office denied modification of the June 1, 2005 decision.

By letter dated February 27, 2006, appellant’s representative requested reconsideration and submitted additional evidence. He again contended that Dr. Sweeney’s report was flawed, in that he incorrectly assumed that the employee always worked outside. Appellant’s representative noted that the record reflected that, for over 30 years, the employee worked in confined spaces. Furthermore, he noted that Dr. Sweeney had attributed a five percent chance that welding fumes may have contributed to the employee’s condition. In an October 1, 2004 statement, appellant described the employee’s 30 years of federal service. Various letters of recommendations and statements from individuals who worked with the employee were also submitted.

By decision dated June 5, 2006, the Office denied appellant’s request for reconsideration without a review of the merits on the grounds that her request neither raised substantial legal questions nor included new and relevant evidence and, thus, it was insufficient to warrant review of its prior decision.

LEGAL PRECEDENT -- ISSUE 1

The United States shall pay compensation for the disability or death of an employee resulting from personal injury sustained while in the performance of his duty.²

Appellant has the burden of proving by the weight of the reliable, probative and substantial evidence that the employee’s death was causally related to his employment. This burden includes the necessity of furnishing rationalized medical opinion evidence of a cause and effect relationship, based on a complete factual and medical background, showing causal relationship. The opinion of the physician must be one of reasonable medical certainty and must be supported by medical rationale.³

In situations where there are opposing medical reports of virtually equal weight and rationale and the case is referred to an impartial medical specialist for the purpose of resolving

² 5 U.S.C. § 8102(a); *see id.* § 8133 (compensation in case of death).

³ *Lois E. Culver*, 53 ECAB 412 (2002).

the conflict, the opinion of such specialist, if sufficiently well rationalized and based on a proper factual background, must be given special weight.⁴

When the Office obtains an opinion from an impartial medical specialist for the purpose of resolving a conflict in the medical evidence and the specialist's opinion requires clarification or elaboration, the Office must secure a supplemental report from the specialist to correct the defect in his original report.⁵ However, when the impartial specialist is unable to clarify or elaborate on his original report or if his supplemental report is also vague, speculative or lacking in rationale, the Office must submit the case record and a detailed statement of accepted facts to a second impartial specialist for the purpose of obtaining his rationalized medical opinion on the issue.⁶

ANALYSIS -- ISSUE 1

The Office properly found a medical conflict between the Office medical adviser and Dr. Markovitz with regard to whether the employee's welding duties caused or contributed to his lung cancer, resulting in his death. The case was referred to Dr. Sweeney, selected as the impartial medical specialist.⁷

In denying the claim, the Office relied on Dr. Sweeney's impartial medical reports to determine that the employee's death was not caused or contributed to his federal employment. However, the Board finds that Dr. Sweeney's opinion is equivocal and speculative as to the causal relationship between the employee's death and his employment. The Board has held that speculative and equivocal medical opinions regarding causal relationship have no probative value.⁸ Dr. Sweeney did not provide a clear opinion ruling out the contribution of exposure to welding fumes as a cause of the employee's death. He stated that it was impossible to exclude occupational exposure to welding fumes as a contribution factor, noting a five percent chance of acceleration by such exposure.

When asked to clarify his opinion, Dr. Sweeney again stated that, if any role was played by exposure to welding fumes, it was as an aggravator or accelerator impossible to exclude. The Board notes that any contribution of employment factors is sufficient to establish the element of causal relation.⁹ The question is whether the employee's death was caused by his employment.

⁴ *Gloria J. Godfrey*, 52 ECAB 486, 489 (2001).

⁵ *Raymond A. Fondots*, 53 ECAB 637, 641 (2002); *Nancy Lackner (Jack D. Lackner)*, 40 ECAB 232 (1988); *Ramon K. Ferrin, Jr.*, 39 ECAB 736 (1988).

⁶ *Roger W. Griffith*, 51 ECAB 491 (2000); *Talmadge Miller*, 47 ECAB 673 (1996).

⁷ *See* 5 U.S.C. § 8123(a).

⁸ *Ricky S. Storms*, 52 ECAB 349 (2001) (while the opinion of a physician supporting causal relationship need not be one of absolute medical certainty, the opinion must not be speculative or equivocal. The opinion should be expressed in terms of a reasonable degree of medical certainty).

⁹ *Roger W. Griffith*, *supra* note 6; *Glenn C. Chasteen*, 42 ECAB 493 (1991); *Arnold Gustafson*, 41 ECAB 131 (1989); *Beth P. Chaput*, 37 ECAB 158 (1985).

Dr. Sweeney did not clearly resolve this issue. His December 12, 2005 report also suggests that his opinion was based on an inaccurate factual history. He indicated that the employee always worked outside in open areas, whereas the record indicates that the employee also worked in enclosed areas and was not given a fume hood until 1992 to reduce the inhalation of gases.

Consequently, Dr. Sweeney's reports are insufficient to resolve the medical conflict. For this reason, the case will be remanded to the Office for further development of the medical evidence. After such further development as the Office deems necessary, an appropriate decision should be issued regarding this matter

CONCLUSION

The Board finds that this case is not in posture for decision.

ORDER

IT IS HEREBY ORDERED THAT the January 10, 2006 decision of the Office of Workers' Compensation Programs is set aside and remanded.¹⁰

Issued: February 20, 2007
Washington, DC

Alec J. Koromilas, Chief Judge
Employees' Compensation Appeals Board

Michael E. Groom, Alternate Judge
Employees' Compensation Appeals Board

James A. Haynes, Alternate Judge
Employees' Compensation Appeals Board

¹⁰ In light of the Board's disposition on the first issue, the second issue is moot.