IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Vincent Regan, :

Petitioner

:

v. : No. 141 C.D. 2018

: Submitted: June 15, 2018

FILED: January 18, 2019

Workers' Compensation Appeal Board (City of Philadelphia),

:

Respondent:

BEFORE: HONORABLE P. KEVIN BROBSON, Judge

HONORABLE MICHAEL H. WOJCIK, Judge

HONORABLE ELLEN CEISLER, Judge

OPINION NOT REPORTED

MEMORANDUM OPINION BY JUDGE WOJCIK

Theresa Regan (Claimant) petitions for review of the January 10, 2018 order of the Workers' Compensation Appeal Board (Board), which affirmed the April 14, 2017 remand decision of a workers' compensation judge (WCJ) denying the claim petitions filed by Vincent Regan (Decedent) and Claimant's fatal claim petition. For the following reasons, we vacate and remand.

Decedent worked for the City of Philadelphia (Employer) as a firefighter for 34 years before his retirement in 2008. On July 9, 2012, Decedent filed a claim petition pursuant to Section 108(r) of the Workers' Compensation Act (Act), alleging that he sustained metastatic lung cancer as a result of exposure to

¹ Act of June 2, 1915, P.L. 736, as amended, added by the Act of October 17, 1972, P.L. 930, 77 P.S. §27.1(r).

Group 1 category carcinogens in smoke and diesel exhaust fumes while working as a firefighter. He alleged the injury date as the last date of exposure, August 13, 2008, the day he stopped working. Decedent filed a second claim petition under Section 108(r) on July 9, 2012, alleging that he sustained prostate cancer on January 4, 2007, also as a result of exposures to Group 1 carcinogens while working as a firefighter. Decedent died on September 29, 2012. On November 26, 2012, Claimant, Decedent's widow, filed a fatal claim petition alleging that Decedent died from metastatic lung cancer.

Claimant testified that Decedent joined the fire department after serving in the army for three years. She said that Decedent started smoking in 1974 and estimated that he smoked about half a pack a day until 2008. Claimant stated that Decedent's father was a smoker and was diagnosed with lung cancer as well as prostate cancer when he was 87 years old. She said that Decedent's sister also had cancer and believed that Decedent's uncles had died of cancer as well.

Claimant testified that when Decedent returned from firefighting, she could smell smoke from his soot-covered fire gear when he opened his car. She said that soot came out when Decedent blew his nose. Claimant also submitted deposition testimony from two of Decedent's fellow firefighters, Joseph Hitchens and Gene Lancaster. Hitchens testified that he and Decedent fought all kinds of fires together, including house fires, car fires, train fires, and rubbish fires. He added that Decedent was involved in ventilation, search and rescue, and overhaul and was exposed to smoke at every stage of the firefighting process.

Hitchens noted that in the 1990s, the use of a self-contained breathing apparatus became mandatory during interior firefighting. However, he said, it was quickly discovered that the mask and pack made some situations more dangerous,

and, therefore, firefighters were no longer required to wear them. He stated that cigarette smoking was common in the firehouse and he observed Decedent smoking occasionally. Hitchens testified that the firehouse did not have a diesel fuel capture system for the fire trucks' exhaust until near the end of Decedent's career. He said that the walls and ceiling of the building were covered with soot and grime.

Hitchens noted that Decedent eventually became a battalion chief, which meant that he drove the chief engine but did not participate in overhaul operations. Hitchens testified that in this new role, Decedent was on the scene of even more fires than before and still exposed to smoke. Hitchens stated there was no doubt in his mind that Decedent was exposed to smoke, diesel fuel, soot, and dirty bunker gear throughout his entire career as a firefighter. Lancaster confirmed Hitchens' testimony, affirming the firefighters' exposures to smoke, soot, diesel emissions, and building materials.

Claimant also presented the deposition testimony of Barry Singer, M.D., who is board certified in internal medicine, hematology, and medical oncology. Dr. Singer noted that he is not a specialist in occupational medicine, nor a toxicologist or an epidemiologist. He stated that he is not engaged in primary research on the matter of firefighters and cancer and he has not published on the etiology of cancer.

Dr. Singer testified that he reviewed extensive literature regarding firefighters' exposures to carcinogens, including the International Agency for Research on Cancer (IARC) monographs. He explained that the IARC monographs identify environmental factors that can increase the risk of cancer, including chemicals, complex mixtures, occupational exposures, physical agents, biological agents, and lifestyle factors. He stated that he has been reviewing medical records

and affidavits regarding exposures for workers' compensation purposes since 2008 and has been able to provide opinions about the cause of each individual's cancer based on the aforementioned information.

Dr. Singer testified that his opinions on the causes of cancer are based on his knowledge of the relationship between firefighting and cancer as well as information about each individual firefighter. He said he reviews a patient's history and risk factors, and he considers the patient's medical care, both before and after his or her cancer diagnosis. He testified that he has relied upon journals and other articles from specialized cancer doctors, such as epidemiologists and toxicologists, regarding carcinogens to which firefighters are commonly exposed. He stated that he also reviewed journal articles written by retired firefighters about their exposures to certain chemicals throughout their careers. Dr. Singer testified that there are thousands of reported studies on the relationship between firefighting and cancers. He specifically referenced four studies in his reports, an article authored by Baris and Bates titled "A Cohort Mortality Study" and articles authored by Howe and Birch. Dr. Singer acknowledged that several studies, including the Baris and Bates and Howe and Birch studies, found no association between firefighting and an increased risk of cancer. He testified that it is beyond his expertise to advise which study is more reliable.

Citing his knowledge of literature and review of workers' compensation files, Dr. Singer opined that firefighters are exposed to Group 1 carcinogens in diesel fuel fumes, smoke, and soot, including PAHs (polycyclic aromatic hydrocarbons), PCBs (polychlorinated biphenyls), and arsenic. He indicated that diesel fuel alone contains carcinogens such as benzene, arsenic, formaldehyde, and nickel. Dr. Singer testified that the constellation of exposures

increases firefighters' risk of certain cancers, and he believes that the effects of smoking would be synergistic or in addition to the impact of exposure as a firefighter.

Dr. Singer issued a report and offered testimony specific to Decedent. He reviewed multiple records pertaining to Decedent including an affidavit prepared prior to his death, his family medical history, records from his treating doctors, and any hospital records. Dr. Singer also reviewed the testimony from Lancaster and Hitchens. He testified that, for this case, he reviewed general literature regarding firefighting and cancer as well as the IARC monographs on firefighters and the list of carcinogens found in smoke and diesel fuel. He testified that the studies he reviewed support both of his opinions that there is an increased risk of prostate cancer as well as an increased incidence of lung cancer in firefighting. He stated that epidemiology was not a necessary element to determine the cause of Decedent's lung cancer since Decedent had been exposed to carcinogens. Dr. Singer believed that, while Decedent was a heavy smoker, he was exposed to fire and its contaminants significantly and that both factors together would be synergistic in the development of Decedent's lung cancer. *See* Exhibit C-8.

On cross-examination, Dr. Singer acknowledged that he did not mention Decedent's smoking history or the role that cigarettes play in the etiology of lung cancer. He agreed that 90% of all lung cancer cases in men are related to smoking. He agreed that there are approximately 3,000 chemicals in cigarette smoke and 55 of them are recognized as Group 1 carcinogens. Dr. Singer acknowledged that a heavy smoker such as Decedent, smoking over 67 packs a year, carries a 40-fold increase in the risk of lung cancer. He stated that consistent with the magnitude of his smoking, Decedent had chronic obstructive pulmonary disease before his lung

cancer diagnosis. Dr. Singer conceded that Decedent could have developed lung cancer just from his smoking habits.

Dr. Singer agreed that none of the articles he relied on in his report could conclusively find that firefighting causes cancer. Dr. Singer acknowledged that there are no known studies finding any relationship between firefighting and lung cancer that even come close to any level of statistical significance and that there is no published research that supports his opinion that firefighting exposures and cigarette smoking interact synergistically. He recognized that the articles he relied on failed to control for family history. Additionally, he testified that no study examining lung cancer in firefighters has been designed to control for cigarette smoking. He stated that his opinion was not based on any epidemiologic literature but, rather, on his personal understanding of Group 1 carcinogens and potential firefighters' exposure to such chemicals.

Employer presented the deposition of Tee Guidotti, M.D., who is board certified in internal, pulmonary, and occupational medicine, and trained in the fields of epidemiology and toxicology. Dr. Guidotti has performed and published peer-reviewed research studies and has spent time investigating the relationship between firefighters and occupational and environmental exposures. He testified that he reviewed Dr. Singer's qualifications, reports, methodology, and his first deposition. Dr. Guidotti opined that Dr. Singer was not qualified to interpret the studies he reviewed and that the meta-analysis Dr. Singer relied on did not meaningfully summarize the studies they incorporate. Dr. Guidotti also believed that Dr. Singer's background did not support a meaningful review of the literature in this scientific field. Dr. Guidotti further testified that Dr. Singer did not use an appropriate

methodology, or any discernable methodology at all, to determine if there was a relationship between firefighters and their cancer.

Dr. Guidotti testified that age, family history, race, and ethnicity are all factors associated with increased risk of prostate cancer. He stated that prostate cancer is the most commonly diagnosed cancer in men and is not normally connected to occupational exposures. He explained that prostate cancer is a disease of aging rather than environmental influences. He added that there is no evidence to support a conclusion that there is a relationship between firefighting and prostate cancer. Employer also submitted the report on prostate cancer by Janet Stanford, Ph.D., which indicated that the well-established risk factors for prostate cancer include age, race, ethnicity, and family history.

Employer offered testimony of Andre Haas, M.D., Ph.D., a specialist in interventional pulmonary and thoracic oncology. Dr. Haas regularly publishes on immunotherapies for thoracic malignancies and on the diagnostic and therapeutic components of evaluating patients with lung nodules and masses, and his practice specializes in differentiation and the diagnosis of lung cancers. Dr. Haas reviewed Decedent's medical records, Decedent's affidavit, and Dr. Singer's deposition.

Dr. Haas had no doubt that Decedent died of lung cancer. Dr. Haas testified that smoking increases the risk of cancer substantially and if a person smokes a pack a day for 30 or so years, the risk association can raise 26-fold. Dr. Haas was provided with evidence that Decedent smoked about 40-50 packs a year.

Dr. Haas stated that while certain epidemiologic studies reveal potential exposures of firefighters to carcinogens in fire smoke and diesel truck exhaust, he is not aware of any studies that show a statistically significant relationship between firefighting and lung cancer. He testified that simple exposure does not correlate to

the development of cancer. Rather, he explained, it is the quantity of the exposure to a certain carcinogen and the amount over time that is important. Dr. Haas acknowledged that there is literature to suggest that smoking and asbestos exposure could have a synergistic effect, but he observed that nothing in Decedent's records indicates any asbestos exposures. Dr. Haas opined that Decedent's exposure to carcinogens in fire and fuel exhaust during his firefighting career were not substantial contributing factors in the development of his lung cancer. Instead, Dr. Haas believed that Decedent's known tobacco usage was the primary etiologic agent of his lung cancer. Further, Dr. Haas testified that Decedent had adenocarcinoma, which is the most common type of cancer associated with smoking cigarettes.

On cross-examination, Dr. Haas agreed that lung cancer is a type of cancer that can be caused by exposure to Group 1 carcinogens present in smoke and exhaust fumes. Further, he agreed that it is possible that firefighting can cause lung cancer when there is substantial lasting exposure to carcinogens. He also acknowledged that Decedent probably came into contact with these carcinogens in smoke and diesel fuel emissions. In sum, Dr. Haas testified that epidemiologic studies have established that exposure to tobacco carcinogens significantly increases the risk for developing lung cancer, whereas no epidemiological data suggests that carcinogen exposure during firefighting was causally related to the development of lung cancer.

In a December 24, 2014 decision, the WCJ accepted Claimant's testimony regarding the state of Decedent's gear, his employment, and his smoking history as credible. She also credited Hitchens' and Lancaster's testimony regarding the firefighting procedures and practices utilized throughout Decedent's career. The WCJ accepted Dr. Singer's testimony concerning the causal relationship between

Decedent's exposure to Group 1 carcinogens and his lung cancer. The WCJ found that the opinions of Dr. Guidotti regarding the methods for determining general causation were not material in this case. Finally, the WCJ accepted the testimony of Dr. Haas to the extent it was consistent with Dr. Singer's testimony. The WCJ found that Claimant was entitled to the presumption that his lung cancer was work-related pursuant to Section 108(r) and Section 301(f) of the Act.² Accordingly, the WCJ granted the claim and fatal claim petitions.

Employer appealed to the Board, which determined that the WCJ did not render any findings as to whether Decedent or Claimant complied with the notice provisions of the Act, nor did she render any findings as to whether the petitions were filed within 300 weeks of Decedent's last exposure as required by Section 301(f) of the Act. The Board remanded the matter with instructions to the WCJ to render a determination on these issues. The Board specifically instructed the WCJ to render findings of fact, conclusions of law, and credibility determinations as necessary and to reconsider her decision to grant the claim and fatal claim petitions.

In her April 14, 2017 remand decision, the WCJ credited the testimony of Dr. Haas and Dr. Guidotti, noting that their credentials include experience researching and examining epidemiologic studies. The WCJ rejected Dr. Singer's testimony as not credible, explaining that he has no credentials or experience in researching or conducting epidemiologic studies. The WCJ also concluded that Dr. Singer's testimony was not competent because he was not Decedent's treating physician, he does not engage in research specifically regarding firefighters, he has not researched the etiology of cancer, and he could not say whether a particular firefighter had any exposure to a given carcinogen. The WCJ determined that Dr.

² 77 P.S. §414.

Singer did not thoroughly consider other factors that might causally contribute to cancer, such as race, diet, and smoking, and that he relied on studies that he admittedly did not completely read. Additionally, the WCJ rejected Dr. Singer's opinion that Decedent's cancer was caused by exposure to any Group 1 carcinogen because he had no data to support his opinion that Decedent was directly exposed to any Group 1 carcinogens that can cause Decedent's particular type of cancer. Consequently, the WCJ concluded that Claimant failed to meet her burden to establish entitlement to benefits under Section 301(c),³ Section 108(r) or (o), or Section 301(f) of the Act,⁴ because she did not submit competent or credible evidence establishing the cause of Decedent's cancer or the date of his last exposure.

The WCJ found that Employer's evidence established that Decedent's prostate cancer and lung cancer were not related to firefighting but were related to other identifiable risk factors, such as family history of prostate cancer and his history of heavy smoking. Therefore, the WCJ concluded that even if the presumption of causation afforded under Section 301 were triggered, Employer successfully rebutted the presumption with competent evidence. Consequently, the WCJ denied the claim and fatal claim petitions.

Claimant appealed the remand decision to the Board. Relying on our decision in *City of Philadelphia Fire Department v. Workers' Compensation Appeal Board (Sladek)*, 144 A.3d 1011 at 1020 (Pa. Cmwlth. 2016) (*Sladek I*), the Board affirmed.

³ Section 301(c) of the Act, added by the Act of July 7, 2011, 77 P.S. §411, defines the terms "injury" and "injury arising in the course of employment" as including occupational disease as defined in Section 108 of the Act, 77 P.S. §27.1.

⁴ 77 P.S. §27.1(o), (r), and 301(f) of the Act, 77 P.S. §414.

On appeal to this Court,⁵ Claimant argues that the Board erred in affirming the WCJ's denial of the claim and fatal claim petitions. Claimant asserted that: (1) the WCJ's determinations were not supported by substantial or competent evidence or pertinent authority; and (2) the WCJ's decision was not a reasoned decision because the credibility determinations on remand were inconsistent with the first decision.

We begin our analysis with a review of the relevant statutory provisions. Section 301(c)(2) of the Act states that a compensable "injury" includes "occupational disease as defined in section 108 of this act." 77 P.S. §411(2). Section 108(r) of the Act recognizes as an occupational disease cancer suffered by a firefighter "which is caused by exposure to a known carcinogen which is recognized as a Group 1 carcinogen by the [IARC]." 77 P.S. §27.1(r) (emphasis added).

Additionally, Section 301(e) of the Act establishes a "presumption regarding occupational disease" that applies to any occupational disease. The section states:

If it be shown that the employe, at or immediately before the date of disability, was employed in any occupation or industry in which the occupational disease is a hazard, it shall be presumed that the employe's occupational disease arose out of and in the course of his employment, but this presumption shall not be conclusive.

Added by the Act of October 17, 1972, P.L. 930, 77 P.S. §413 (emphasis added). A claimant who suffers a disease identified in Section 108 of the Act does not have to prove that the occupational disease was caused by workplace exposure.

⁵ Our scope of review is limited to determining whether necessary findings were supported by substantial evidence, whether an error of law was committed, or whether constitutional rights were violated. *Minicozzi v. Workers' Compensation Appeal Board (Indus. Metal Planting, Inc.)*, 873 A.2d 25, 28 n.1 (Pa. Cmwlth. 2005).

Section 301(f) of the Act states in part:

Compensation pursuant to cancer suffered by a firefighter shall only be to those firefighters who have served four or more years in continuous firefighting duties, who can establish direct exposure to a carcinogen referred to in section 108(r) relating to cancer by a firefighter and have successfully passed a physical examination prior to asserting a claim under this subsection or prior to engaging in firefighting duties and the examination failed to reveal any evidence of the condition of cancer.

Added by the Act of October 17, 1972, P.L. 930, 77 P.S. §414. Thus, in order to demonstrate that a firefighter's cancer is an occupational disease compensable under the Act, the firefighter must show that his type of cancer is "caused by exposure to a known carcinogen which is recognized as a Group 1 carcinogen." 77 P.S. §27.1(r). If a firefighter establishes that his type of cancer is an occupational disease, he may avail himself of the statutory presumption in Section 301(f) of the Act, provided that he filed his claim within 300 weeks of his last day of employment. The statutory presumption relieves the firefighter of the need to prove that his cancer was caused by his workplace exposure and not another cause. 77 P.S. §413. An employer may rebut this presumption through substantial competent evidence that shows that the firefighter's cancer was not caused by the firefighter's occupation. 77 P.S. §414.

This Court first interpreted Section 108(r) of the Act in *Sladek I*. In that case, we rejected the Board's interpretation of Section 108(r) to mean that a firefighter's cancer is presumed work-related if the firefighter was exposed to a Group 1 carcinogen at work, regardless of whether the firefighter's cancer is a type of cancer known to be caused by exposure to Group 1 carcinogens. Instead, we concluded in *Sladek I* that Section 108(r) of the Act requires the firefighter to show that the Group 1 carcinogens to which he was exposed have been shown to cause the

type of cancer suffered by the firefighter.

Subsequently, however, our Supreme Court reversed our decision and remanded the matter for further proceedings. *City of Philadelphia Fire Department v. Workers' Compensation Appeal Board (Sladek)*, ___ A.3d ___ (Pa., No 13 EAP 2017, filed October 17, 2018) (*Sladek II*). In doing so, the Court held that in order for a claimant to establish that he or she has an "occupational disease" as defined in Section 108(r) of the Act, a claimant must initially demonstrate only that his or her cancer *is a type of cancer* that *is capable of being caused* by exposure to a known IARC Group I carcinogen. The Court reasoned as follows:

The express language of Section 108(r), namely that the claimant has a "cancer . . . which is caused by exposure to a known (Group 1) carcinogen" clearly imposes an initial burden of causation on the claimant. Importantly. however, the provision only requires the claimant to establish a general causative link between the claimant's type of cancer and a Group 1 carcinogen. In other words, the claimant must produce evidence that it is **possible** that the carcinogen in question caused the type of cancer with which the claimant is afflicted. It does not require the claimant to prove that the identified Group 1 carcinogen actually caused claimant's cancer. Section 108(r) embodies a legislative acknowledgement that firefighting is a dangerous occupation that routinely exposes firefighters to Group 1 carcinogens that are known to cause various types of cancers. The "general causation" requirement under Section 108(r) constitutes a recognition that different types of cancers have different etiologies and it weeds out claims for compensation for cancers with no known link to Group 1 carcinogens. The burden imposed by Section 108(r) is not a heavy burden.

Sladek II, ____ A.3d at ____ (slip op. at 17-18) (emphasis in original) (footnotes omitted).

Additionally, in *Sladek II* the Court held that "epidemiological evidence is clearly relevant and useful in demonstrating general causation." *Id.*, ____ A.3d at ____, slip op. at 18. However, while the Court held that *a claimant* may rely on epidemiological evidence to meet his or her initial burden and trigger the statutory presumption of compensability, the Court also concluded that such evidence is not sufficient for *an employer* to rebut the presumption. *Id.*, ____ A.3d at ____, slip op. at 19-20.

In this appeal, Claimant argues that the WCJ's conclusion that she did not meet her initial burden and failed to establish entitlement to the presumption is not supported by substantial competent evidence. Additionally, Claimant argues that Employer failed to rebut the presumption to which she was entitled.

In assessing the record evidence in this case, the Board and the WCJ relied on our analysis in *Sladek I*, which is no longer controlling. Consequently, we are compelled to vacate and remand the Board's decision. Because the record includes evidence presented by both parties that is relevant under the Supreme Court's analysis in *Sladek II*, the Board is to remand the matter to the WCJ for new findings and conclusions consistent with that opinion.⁶

MICHAEL H. WOJCIK, Judge

Judge Fizzano Cannon did not participate in the decision of this case.

⁶ Claimant also contends that the WCJ failed to issue a reasoned decision because her credibility determinations were inconsistent with her 2014 decision and order. Section 422(a) of the Act requires the WCJ to issue a reasoned decision. 77 P.S. §834. A reasoned decision is one that allows for adequate appellate review without further elucidation. *Daniels v. Workers' Compensation Appeal Board (Tristate Transport)*, 828 A.2d 1043, 1052 (Pa. 2003). A WCJ is not required to reach the same result on remand and is generally free to revise any credibility determinations. *Teter v. Workers' Compensation Appeal Board (Pinnacle Health System)*, 886 A.2d 721, 723 (Pa. Cmwlth. 2005).

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:

Respondent:

ORDER

AND NOW, this <u>18th</u> day of <u>January</u>, 2019, the order of the Workers' Compensation Appeal Board, dated January 10, 2018, is VACATED, and this matter is REMANDED to the Workers' Compensation Appeal Board for further remand to the workers' compensation judge in accordance with the foregoing opinion.

Jurisdiction relinquished.

MICHAEL H. WOJCIK, Judge

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BEFORE: HONORABLE P. KEVIN BROBSON, Judge HONORABLE MICHAEL H. WOJCIK, Judge

HONORABLE ELLEN CEISLER, Judge

OPINION NOT REPORTED

DISSENTING OPINION BY JUDGE BROBSON

Although I recognize the Pennsylvania Supreme Court's decision in City of Philadelphia Fire Department v. Workers' Compensation Appeal Board (Sladek), 195 A.3d 197 (Pa. 2018) (Sladek II), as controlling for purposes of the proper construction of Section 108(r) of the Workers' Compensation Act (Act),¹

¹ Act of June 2, 1915, P.L. 736, *as amended*, added by the Act of October 17, 1972, P.L. 930, 77 P.S. § 27.1(r). Section 108 of the Act lists a number of occupational diseases that constitute a compensable injury under the Act. Among them is "[c]ancer suffered by a firefighter which is *caused by exposure to a known carcinogen* which is recognized as a Group 1 carcinogen by the International Agency for Research on Cancer [IARC]." (Emphasis added.) A substance or exposure is considered carcinogenic based on its propensity to cause cancer in humans. The IARC, which is part of the World Health Organization, classifies substances and exposures based on their cancer-causing potential. Group 1 carcinogens are those substances and exposures that the IARC considers carcinogenic to humans. Group 2A, by contrast, includes substances and exposures that are "possibly" carcinogenic to humans. Group 3 includes substances and exposures that are

I find it difficult to distinguish between the Supreme Court construction and that of this Court in *City of Philadelphia Fire Department v. Workers' Compensation Appeal Board (Sladek)*, 144 A.3d 1011 (Pa. Cmwlth. 2016) (*Sladek I*), which the Supreme Court reversed in *Sladek II*. *See Sladek II*, 195 A.3d at 212-13 (Saylor, C.J., dissenting) (rejecting Claimant's false premise that Commonwealth Court required claimant to prove specific causation). Accordingly, I would analyze and resolve this appeal based on a harmonious reading of the two opinions.

Workplace causation is required in order for any disabling injury to be compensable under the Act. *See*, *e.g.*, *Whitmoyer v. Workers' Comp. Appeal Bd.* (*Mountain Country Meats*), 186 A.3d 947, 948 (Pa. 2018) ("The [Act] makes an employer liable for paying the disability benefits and medical expenses of an employee who sustains an injury in the course of his or her employment."). This is true regardless of whether the disabling injury is acute or develops over a prolonged period of time, as in the case of an occupational disease. The burden falls on the claimant to establish a causal relationship between his employment and the disabling injury. *See*, *e.g.*, *Cardyn v. Workers' Comp. Appeal Bd. (Heppenstall*), 534 A.2d 1389, 1390 (Pa. 1987). Section 108(r) of the Act clearly incorporates this causation

[&]quot;unclassifiable" as to carcinogenicity in humans. Finally, Group 4 includes substances and exposures that are "probably not" carcinogenic to humans. (https://www.cancer.org/cancer/cancer-causes/general-info/known-and-probable-human-carcinogens.html) (last visited Dec. 28, 2018).

I also wish to emphasize that Section 108(r) of the Act does not inquire as to whether firefighting, as an occupation, is a Group 1 carcinogen. In her findings of fact in this case, the Workers' Compensation Judge (WCJ) noted that the IARC has categorized the profession of firefighting as a Group 2B, not Group 1, carcinogen. Such a finding, however, is irrelevant. The text of the Section 108(r) expressly allows firefighters to pursue benefits under the Act to the extent they suffer from a cancer linked to a Group 1 carcinogen, regardless of whether the profession itself is classified as such.

aspect to compensation under the Act, as it commands that cancer suffered by a firefighter is an occupational disease under the Act *only* where the cancer "is caused by" exposure to a Group 1 carcinogen.

With respect to occupational diseases generally, Section 301(e) of the Act² provides for a rebuttable evidentiary presumption of workplace causation where the claimant "was employed in any occupation or industry in which the occupational disease is a hazard." The Act, however, includes a specific evidentiary presumption for firefighters who suffer from cancer. Under Section 301(f) of the Act,³ workplace causation and, thus, compensation are presumed where the firefighter claimant (a) "served four or more years in continuous firefighting duties," (b) "can establish direct exposure to a carcinogen referred to in [S]ection 108(r) [of the Act] relating to cancer by a firefighter," and (c) "successfully passed a physical examination prior to asserting a claim . . . or prior to engaging in firefighting duties and the examination failed to reveal any evidence of the condition of cancer." The employer may rebut this presumption with "substantial competent evidence that shows that the firefighter's cancer was not caused by the occupation of firefighting." Section 301(f) of the Act.

With respect to causation, in *Sladek I*, this Court held, *inter alia*, that a claimant firefighter, seeking the benefit of the evidentiary presumption of Section 301(f) of the Act, need not establish *actual* causation—*i.e.*, that the claimant's firefighting service actually caused the claimant's cancer. Rather, the claimant need only show "direct exposure" to a Group 1 carcinogen in the course of firefighting that is linked to the type of cancer from which the claimant suffers. In

² Added by the Act of October 17, 1972, P.L. 930, 77 P.S. § 413.

³ Added by the Act of July 7, 2011, P.L. 251, 77 P.S. § 414.

this regard, we held only that a claimant needed to establish a general causative link between a carcinogen to which he was exposed and the cancer from which he suffers. We explained:

It was incumbent upon [the c]laimant to prove that his malignant melanoma *is a type of cancer* caused by the Group 1 carcinogens to which he was exposed in the workplace to establish an occupational disease. Only then do the presumptions in Section 301(e) and (f) of the Act come into play.

Sladek I, 144 A.3d at 1021-22 (emphasis added). Nowhere in Sladek I did this Court hold that the claimant must go a step further and "prove that the identified Group 1 carcinogen actually caused [the] claimant's cancer." Sladek II, 195 A.3d at 208 (emphasis removed).

I read the Supreme Court's decision in *Sladek II* as requiring nothing more and nothing less. First, the claimant firefighter must establish that he or she has an "occupational disease," as defined in Section 108(r) of the Act. The Supreme Court held that, in order to do so, the claimant need only "establish a general causative link between the claimant's type of cancer and a Group 1 carcinogen. In other words, the claimant must produce evidence that it is possible that the carcinogen in question caused *the type of cancer* with which the claimant is afflicted." *Id.* (emphasis added) (original emphasis removed). As the Supreme Court recognized in *Sladek II*, the claimant may do so through the use of epidemiological evidence. *Id.*

Once the claimant meets this threshold burden, in order to take advantage of the presumption of causation in Section 301(f) of the Act, the claimant firefighter must establish each of the elements set forth above, including "exposure" to the carcinogen in question. Section 301(f) of the Act also requires that the presumption only applies "to claims made within the first three hundred weeks" after

the last date of claimant's employment in which he was exposed to the carcinogen in question. If the presumption is triggered, the burden under Section 301(f) shifts to the employer to rebut the presumption by showing "that the firefighter's cancer was not caused by the occupation of firefighting." In terms of the employer's evidentiary burden on this point, the Supreme Court opined:

[T]he employer may not rebut the evidentiary presumption with generalized epidemiological evidence that [the] claimant has a type of cancer that may (or may not) possibly be caused by a Group 1 carcinogen. As indicated, epidemiological studies merely identify associations between disease and potentially causative agents in broad populations, and thus do not provide any evidence demonstrating the specific cause of a particular claimant's cancer. To reach the stage of the proceedings at which the employer attempts to rebut the presumption of employment-related causation, the claimant has already carried his or her Section 108(r) burden of proof that his or her cancer is of a type that may be caused by a Group 1 carcinogen. The employer may not rebut the evidentiary presumption merely by revisiting this determination and challenging its accuracy. At the rebuttal stage, the issue relates not to "types of cancer" relative to potential carcinogens, but rather requires proof of [sic] that the cancer from which the claimant suffers was not caused by his occupation as a firefighter.

Id. at 209-10 (footnote omitted) (emphasis added).

The majority vacates the decision of the Workers' Compensation Appeal Board (Board) in this matter and remands the matter to the Board, with a directive that the Board remand the matter to the WCJ for new findings and conclusions in light of *Sladek II*. Respectfully, for the reasons set forth below, I would reverse the Board's decision, which affirmed the WCJ's conclusion that Claimant failed to meet her initial burden under Section 108(r) of the Act. I would, nonetheless, remand the matter to the WCJ for further consideration on whether

Claimant established all of the statutory elements for the presumption of causation under Section 301(f) of the Act and, if so, whether the City of Philadelphia (Employer) rebutted that presumption under the standard announced by the Supreme Court in *Sladek II*.

The record in this case unquestionably establishes that Theresa Regan (Claimant) met the initial hurdle of establishing that her husband's (Decedent) diagnosis and death from lung cancer fall within the definition of "occupational disease" under Section 108(r) of the Act. As the majority notes, Barry Singer, M.D., Claimant's expert witness, and Andre Haas, M.D., Ph.D., Employer's expert witness, agreed that lung cancer is linked to exposure to Group 1 carcinogens found in diesel fuel fumes, smoke, and soot. Given the fact that the WCJ expressly credited Dr. Haas's testimony over that of Dr. Singer's, I highlight the following testimony from Dr. Haas:

- Q. So, to cut right to it, in your opinion, there is no doubt that lung cancer is the type of cancer that can be caused by IARC Group 1 carcinogens; is that correct?
 - A. Correct.
- Q. There's also no doubt that [Decedent] would come in contact with IARC --- come in direct contact with IARC Group 1 carcinogens in smoke if he did not have a mask on?
 - A. That's probably correct, yes.
- Q. And diesel fuel emissions is a direct --- is a IARC Group 1 carcinogen as of, I think, July 2012; correct?
 - A. Correct.
- Q. And there's no doubt, from what you reviewed, that he had daily exposure to diesel fuel emissions; correct?
 - A. Correct.

Q. So throughout his career, from start to finish, there's no doubt that he had direct exposure with IARC Group 1 carcinogens that cause lung cancer?

A. Correct.

(Reproduced Record at 566-67.) This expert testimony, credited by the WCJ, is sufficient to bring Decedent's lung cancer within the definition of an occupational disease under Section 108(r) of the Act, as it creates a general causative link between lung cancer and exposure to certain Group 1 carcinogens. *Sladek I* and *Sladek II*.

Turning to the proof elements required under Section 301(f) of the Act, it appears undisputed that, throughout the course of his career, Decedent was in fact exposed to these lung cancer-causing carcinogens. It also appears undisputed that the claim petitions in this matter were filed within 300 weeks of Decedent's last exposure. Decedent served as a firefighter for the City for 34 years, well in excess of the four years of continuous service required under Section 301(f) of the Act. Nonetheless, I see nothing in the Board's opinion, the WCJ's determination, or the parties' briefs on appeal to address the final proof element under Section 301(f), that being a physical examination that reveals no evidence of lung cancer prior to either the filing of the claim in this matter or Decedent engaging in firefighting duties. Accordingly, it would be inappropriate for this Court on appeal to render any findings with respect to this aspect of the Section 301(f) presumption. This is a task for the WCJ.

On remand, if Claimant can satisfy this final proof element under Section 301(f) of the Act, then Claimant is entitled to the evidentiary presumption that Decedent's lung cancer diagnosis and death are work-related and, therefore, covered under the Act. The burden would then shift to Employer to show by substantial competent evidence that Decedent's lung cancer "was not caused by the occupation of firefighting." Given the substantial uncertainty and confusion in this

area of the law during the pendency of this matter, the WCJ should reopen the record
to take additional evidence on these questions in light of <i>Sladek II</i> .

P. KEVIN BROBSON, Judge