

U. S. DEPARTMENT OF LABOR

Employees' Compensation Appeals Board

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In the Matter of STEPHEN A. McCARTHY and DEPARTMENT OF THE AIR FORCE,  
EIELSON AIR FORCE BASE, North Pole, Alas.

*Docket No. 96-1688; Submitted on the Record;  
Issued May 8, 1998*

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DECISION and ORDER

Before WILLIE T.C. THOMAS, MICHAEL E. GROOM,  
BRADLEY T. KNOTT

The issue is whether the Office of Workers' Compensation Programs properly terminated compensation effective October 16, 1994.

On August 18, 1986 appellant, then a 36-year-old pipefitter, filed a claim for compensation for nausea and vomiting from exposure to welding fumes. In a subsequent statement, appellant indicated that on August 15, 1986 he and a coworker were assigned to repair the copper expansion joint between a steam turbine and a condenser in the central heating and power plant of the employing establishment. He noted that they used an oxy-acetylene torch for the welding and used a blower fan and canister-type respirators. Appellant commented that they started work at 9:30 a.m. that day and the work seemed to go well at first. He noted tightness in his chest at the lunch break. Appellant stated that when his coworker began welding again after the lunch break, he noticed that the coworker developed an erratic weld procedure that hindered the smoothness of the weld. He then took over the welding and found that he was unable to concentrate on the weld at hand and became disoriented. Appellant and his coworker quit working at 3:15 p.m. He indicated that he had nausea and headaches which were overwhelmed by the disorientation he felt. Appellant commented that he was sick all weekend with chills, nausea and aching. He and his coworker informed their supervisor on August 18, 1986 that they had been sick all weekend and were not feeling well. The supervisor checked with them on the respirators they used and instructed them to set up an asbestos suction fan. His coworker then began welding while he gathered tools. Appellant entered the welding field after his coworker. Both men became nauseated quickly. They both went outside for fresh air and began vomiting. They were then taken to the employing establishment clinic.

Appellant's supervisor indicated that the welding rod used was a Eutectic 1020 containing 56 percent silver. He noted that the flux, which was part of the rod, was believed to be fluoride based. Appellant's supervisor reported that the copper coupling being welded was approximately 30 years old and had been installed by the manufacturer. He indicated that the filter on the respirator mask removed up to 99.7 percent of the particulate

matter from welding fumes. He stated that on August 15, 1986 he checked on both employees at 3:00 p.m. and noted they had red eyes but both said they were feeling okay. At 3:30 p.m. both men came to his office and let him know they were not feeling well. On August 18, 1986 both employees were feeling tightness in their chests but decided to complete the job. A fan was set up to help remove fumes from the work site. At 9:40 a.m. the supervisor received a telephone call that appellant, his coworker and a third employee who had been working near where the fumes were vented were very sick. The supervisor then took all three men to the employing establishment dispensary. Appellant did not return to work after August 18, 1986.

The Office accepted appellant's claim for toxic fume exposure. Appellant received continuation of pay for the period August 18 through October 1, 1986. The Office began payment of temporary total disability compensation effective October 2, 1986.

In a September 29, 1994 decision, the Office terminated appellant's compensation effective October 16, 1994 on the grounds that his employment-related disability had ceased. In an April 1, 1996 decision, an Office hearing representative, after a review of the written record, found that the weight of the medical evidence established that appellant had no further disability for work due to his August 18, 1986 employment injury. She therefore affirmed the Office's September 29, 1994 decision.

The Board finds that the Office met its burden of proof in terminating appellant's compensation.

Once the Office accepts a claim, it has the burden of justifying termination or modification of compensation benefits. After it has determined that an employee has disability causally related to his or her federal employment, the Office may not terminate compensation without establishing that the disability has ceased or that it is no longer related to the employment.<sup>1</sup>

In an August 27, 1986 report, Dr. Michael J. Heinle, a Board-certified internist, indicated that appellant had been hospitalized for treatment of a history of exposure to heavy metals and possible arsenic. He stated that appellant and several others were welding in an enclosed space using nickel-silver welding rods, a fluorine flux and acid and were welding on copper arsenic metal. Dr. Heinle committed that all the workers shared common symptoms of malaise, nausea, abdominal discomfort, myalgia and tightness in the chest with shortness of breath. He concluded that appellant was exposed to some unknown toxic substance or heavy metals. Dr. Heinle noted that appellant was being treated with chelating agents. He reported that urine tests showed appellant's level of copper was twice normal limits and his level of zinc was mildly elevated. The amounts of calcium, magnesium, iron, arsenic, lead and mercury were within normal limits. He concluded that appellant probably had welder's fume lungs with a systemic reaction. In subsequent reports, Dr. Heinle noted that appellant continued to have symptoms including loss of appetite, recurrent headaches, abdominal cramping, diffuse myalgia and occasional muscle twitching. In a September 11, 1986 note, Dr. Jonathan Starr, a Board-certified internist, reported that hair and nail examination done on August 27, 1986 showed elevated mercury and lead

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<sup>1</sup> Jason C. Armstrong, 40 ECAB 907 (1989)

content. In an October 3, 1986 note, Dr. Heinle reported that appellant, like his coworkers, had been complaining of empiric judgment, memory deficits, headaches, emotional lability and decreased libido. In an October 29, 1986 report, Dr. Heinle diagnosed neurotoxicity.

In an October 22, 1986 report, Dr. Mary K. Cragan, a psychologist, stated that psychological tests showed possible mild impairment in attentional areas. She commented that attentional impairment could affect a wide variety of activities and could be responsible for some of the confusion that appellant was experiencing.

In a December 19, 1986 report, an industrial hygienist stated that the welding rod used by appellant contained 56 percent silver, 17 percent zinc, 20 percent copper and 5 percent tin. He noted that the rod also contained a flux which consisted of six percent of the weight of the rod and contained sodium fluoroborate, potassium fluoride, boric acid, potassium borate, potassium chloride and lithium chloride. The hygienist reported that the turbine was put back together and put into operation without the work being completed. He noted that the Office of Safety and Health Administration were unable to evaluate the site because the employing establishment was unwilling to shut down the turbine.

In a January 6, 1987 report, Dr. Brenda D. Townes, a psychologist, stated that appellant showed good retention of past learning with significant impairment in the areas of attention, memory and problem solving. She commented that it was likely appellant had an emotional component to those difficulties. Dr. Townes stated that appellant's deficits were larger than would be expected given the time between exposure and examination. She indicated that the findings were not consistent with dysfunction due to toxic exposure. A magnetic resonance imaging (MRI) scan of the head demonstrated no abnormalities.

The Office referred appellant, together with the statement of accepted facts, and the case record, to Dr. Owen Hanley, a Board-certified pulmonologist, who diagnosed, in an April 3, 1989 report, organic central nervous system disease, manifested by the decrease in appellant's prior level of intellectual functioning, reduced memory, reduced comprehension of spoken instructions, reduced ability to do mathematical calculations and persistent and incapacitating headaches. Dr. Hanley also diagnosed affective disorder manifested by depression which might be an additional manifestation of organic central nervous system disease or a result of appellant's other symptoms. He stated that appellant had persistent nausea which was probably neurogenic and related to his headaches. Dr. Hanley related appellant's condition to his employment injury, noting that none of the symptoms existed prior to the employment injury. He stated that appellant continued to be totally disabled. Dr. Hanley commented that the occurrence of similar symptoms in the other workers exposed at the same time lent validity to his exposure to toxic substances on the date of injury. He indicated that the presence of a number of metal above the toxic level found on analysis after the injury supported a causal connection. Dr. Hanley commented that it was not necessary to specify which of these substances or other substances was the primary toxin in order to determine that appellant had an occupationally related injury.

The Office referred appellant to a panel of specialists for examination. In a February 3, 1994 report, Dr. C. Kirby Griffin, a Board-certified specialist in occupational medicine and Dr. Jacob H. Wilson, a neurologist, related that in their examination and interview, appellant had a violent outburst, yelled loudly and attempted to overturn a table. Appellant's wife and sister,

who were present, indicated that such outbursts were common with appellant. The physicians reported that they terminated the interview and performed a partial physical examination. However, appellant refused to continue the examination after it was determined that his motor coordination and strength in his hands appeared normal. Dr. Griffin and Dr. Wilson stated that appellant had acute intoxication of metal fume fever type secondary to his exposures at work. The doctors stated that the acute exposure and subsequent symptoms had fully resolved. They also diagnosed an unspecified neuropsychiatric disorder which was unrelated to the employment injury. The doctors stated that exposure to copper or copper fumes would not cause chronic symptoms of the type appellant was demonstrating. They indicated that exposure to manganese or manganese fumes would cause a chronic neurologic disorder which was characterized by lassitude and somnolence, as well as muscle pains, headaches and clumsiness which progressed to a parkinsonian-like syndrome. They stated that appellant did not demonstrate any of the findings that one would see in a chronic manganese poisoning, particularly the characteristic walk, tremors, muscle rigidity or rhythmic movements of the arms and legs.

In a separate February 3, 1994 report, Dr. Eugene Klecan, a Board-certified psychiatrist, diagnosed probable schizophrenia with catatonic and paranoid features, probable narcotics dependence, and probable personality disorder with features of schizoid withdrawal, explosiveness, dramatics and behaviors which control his environment. He stated that there was no objective evidence that appellant was experiencing residuals of the employment injury. Dr. Klecan indicated that the abnormalities exhibited by appellant were not characteristic nor consistent with organic encephalopathy. He noted refusals, threats, and schizotypal-catatonic appearance characterized appellant's mental status. Dr. Klecan pointed out that psychological testing as early as 1986 was consistent in stating the abnormalities appellant exhibited were not consistent with toxic encephalopathy. He stated that the history reported by appellant's relatives of continued progressive deterioration of mental functioning absolutely disproved organic encephalopathy from toxic exposure, since toxic encephalopathy improved shortly after exposure and would not progress. Dr. Klecan indicated that appellant could not perform his job as a pipefitter because there was evidence that appellant had severe chronic mental illness which could not be explained by any toxic exposure which may have occurred.

In a February 8, 1994 report, Dr. Sheldon Wagner, a clinical toxicologist and specialist in occupational medicine, stated that it seemed clear that appellant suffered some type of acute neurotoxic syndrome following his initial exposure while working in a closed space without an adequate respiratory system of closed air return or vapor barrier mask. He noted the detailed report of the industrial hygienist of the chemicals to which appellant was exposed. Dr. Wagner stated that under the conditions in which appellant worked, the fumes that would arise first and have the highest concentration would be zinc as it had a lower point of vaporization than the other metals present. He indicated that zinc was associated with metal fume fever in both respiratory and gastrointestinal complaints but was a short term condition, not associated with chronic effects. Dr. Wagner commented that there would be a concern for inhalation of silver but there was no documentation that silver was measured and was a problem. He noted that there also was a concern for nickel being transformed into the more toxic nickel carbonyl in the presence of carbon dioxide which could produce a chronic brain syndrome. Dr. Wagner pointed out, however, that there was no evidence provided that any carbonate was used. He commented that the identification of the fluxes as being fluorobornates or fluorides was important since he

anticipated no carbon dioxide would have been formed from interaction with the flux. Dr. Wagner indicated that the use of other chemicals such as sodium fluoroborate and the potassium fluoride flux, and the possible presence of other gases such as ozone and nitrogen dioxide, would produce primarily respiratory symptoms. He noted that the use of chelating agents must be considered as nickel would not respond well to chelating agents and, with an improper dose, may even increase the levels of nickel in the body. Dr. Wagner commented that the initial laboratory work showed normal levels of iron, arsenic, lead and mercury and concluded that these levels did not cause appellant's initial intoxication. He indicated that the elevation of copper was mild and at best would cause gastrointestinal complaints. Dr. Wagner stated that the elevation of zinc confirmed that this was the primary metal with which to be concerned since it would be the initial gas formed in the welding. He noted that, although complete records were not provided, the initial impression indicated that appellant had welder's fume lungs with a systemic reaction. He stated that zinc should not cause chronic brain disorder. Dr. Wagner indicated that appellant's continuation of symptoms and the worsening of such symptoms was not consistent with an acute metal intoxication.

The reports of Drs. Wagner, Griffith and Wilson demonstrate that appellant's disability was not related to any of the metals to which he was exposed on August 15 and August 18, 1986. The physicians, particularly Dr. Wagner, used the initial test results of the presence of these metals in appellant and the report of the industrial hygienist of the metals present on those days to conclude that the metals appellant was exposed to would not have caused the chronic mental disorder that appellant had. Dr. Hanley had diagnosed an organic brain disorder. Dr. Klecan, however, thoroughly explained that the symptoms shown by appellant were not caused by an organic disorder arising from toxic encephalopathy. These physicians presented detailed, well-rationalized reports based on the medical records available. These reports established that appellant's disability due to the exposure to chemicals at work had ceased and that his disability was no longer related to this exposure. The reports form a sufficient basis for the Office's decision to terminate appellant's compensation.

The decision of the Office of Workers' Compensation Programs, dated April 1, 1996, is hereby affirmed.

Dated, Washington, D.C.  
May 8, 1998

Willie T.C. Thomas  
Alternate Member

Michael E. Groom  
Alternate Member

Bradley T. Knott  
Alternate Member