APPEAL NO. 93668

At a contested case hearing held in (city), Texas, on June 1 and 29, 1993, with the record closing on July 9, 1993, the hearing officer, (hearing officer), took evidence on the sole disputed issue, namely, whether the death of (decedent) was due to a work-related The hearing officer concluded that decedent's death on (date of injury), was illness. causally connected with the nature and conditions of his work environment as an arc welder for (employer) and that his death is compensable under the Texas Workers' Compensation Act, TEX. LAB. CODE ANN. § 401.001 et seq. (1989 Act). Appellant (carrier), the workers' compensation insurance carrier for the employer, asserts on appeal that there is both no evidence and insufficient evidence to establish that decedent sustained an occupational disease and that his death was due to a work-related illness. The carrier, in essence, challenges the sufficiency of the opinion of decedent's pulmonary specialist on causation and contrasts it with the opinion of the carrier's expert medical witness, focusing on the bases for their respective opinions. In her response, the respondent widow of decedent (claimant) asserts the sufficiency of the evidence to support the hearing officer's determination and urges our affirmance.

DECISION

Finding the evidence sufficient, we affirm.

The parties stipulated that decedent was an employee of employer at all times pertinent to this case and that claimant is the proper legal beneficiary of decedent. In its appeal, the carrier states: "[i]t was undisputed that Decedent was a long-term employee who had been exposed over the years to welding dust, fumes, and gases. It was further undisputed that the Decedent expired as a result of acute respiratory failure, chronic respiratory failure, congestive heart disease and pulmonary fibrosis. It was further established that the Decedent had a nephrotic syndrome. What was hotly disputed was whether or not the Decedent's medical condition and death was caused by siderosis or other exposure to welding fumes and gases."

Decedent's coworker, (Mr. S), testified that he had worked with decedent as a welder for 19 years and that decedent did the initial welding on the materials while Mr. S finished them. He stated that employer's building resembled a warehouse, was about 25 feet wide, and had no central heating or air conditioning. He said that when the doors were closed due to cold temperatures, the room became very smoky and it was difficult to breathe. He said that he and decedent wore welder's hoods which prevented blindness but which were not tight against the face and which did not prevent smoke and soot from coming up under the hoods and onto their faces, and that soot got into the welders' nostrils. After decedent's death, Mr. S said that "smokeaters" were installed close to the welding positions and that fans were also installed in the room. He identified photographs of the warning label on the spool of welding wire used by decedent which stated, in part, that fumes and gases can be dangerous to health and warned of keeping one's head out of the fumes. He also identified a product label on the wire spool which described it as "carbon steel gas-shielded (75%AR/25%CO2) flux cored electrode." This label also contained a warning stating, in part: "Inadequate ventilation and improper use of this product may expose you or others to fumes or gases at unsafe levels. Welding fumes contain primarily oxides of the product contents listed below [iron, manganese, silicon, and titanium dioxides] fluorides, if contained in product, carbon monoxide, carbon dioxide, ozone, and oxides of nitrogen. The ACGIH recommended general limit for welding fume is 5mg/M1. Lung, nervous system damages may result from over exposure."

Claimant testified that she and the decedent were married in 1955 and that decedent commenced his work with employer as a welder in 1968. He stopped working in January 1992 to seek medical treatment from (Dr. H) for complaints of blood in his urine and kidney pain. According to his medical records, decedent was hospitalized in February, in March, and again in May and he died on (date of injury), at the age of 60. Claimant further testified that decedent's work clothes, which he changed every two days, were so covered with soot and grime that she had to wash them in a commercial establishment. Despite the fact that decedent wore gloves while welding, his hands were always dirty and his face was covered with soot which even got into his underwear. According to claimant, she and the decedent stopped smoking cigarettes in 1983, although she was aware he thereafter would occasionally smoke out of her presence. She said that decedent began to experience breathing difficulties in the late 1980s which worsened in 1990 to the extent he could not mow the grass. She said decedent was treated by Dr. H and by (Dr. W), a pulmonary specialist, and that both doctors frequently told her decedent had pulmonary fibrosis which was caused by the welding and his breathing dust, wire, steel and fumes. Referring to the welding, claimant stated that Dr. W told her "that's what killed him."

The carrier introduced an unsigned "to whom it may concern" letter of May 4, 1992, on Dr. H's letterhead stating decedent "has rapidly progressive pulmonary fibrosis of unknown etiology." In a March 20, 1992, report, Dr. W stated: "[m]ultiple etiologies for [decedent's] pulmonary fibrosis exist including an occupational relationship. He has been a long-time welder." According to Dr. W's record of May 15, 1992, decedent was discharged on April 14, 1992, after nearly a month in the hospital where he underwent a lung biopsy on March 27th which showed, according to Dr. W's report of May 29th, "extensive fibrotic changes and pigment containing monocytes and histiocytes." The operative report stated the postoperative diagnosis as "interstitial infiltrates of the lung." Decedent's chest x-ray of March 23rd showed chronic interstitial lung disease involving the lower lung fields. Decedent's final diagnosis upon discharge on April 14th stated the first of six conditions as "pulmonary fibrosis with hypoxemic respiratory failure, probable siderosis." Dr. W listed decedent's medical problems in the May 15th report as: interstitial lung disease, presumed siderosis, (a) hypoxemic respiratory failure; 2) nephrotic syndrome of uncertain etiology; 3) anasarca secondary to the above, improved; 4) history of hypertension, currently normotensive; 5) past history of alcoholism, abstinent for greater than 15 years; and 6) hypertensive cardiovascular disease. Dr. W's May 15th report also stated: "It was my feeling that his lung disease was probably on the basis of siderosis from his welding."

Decedent's death certificate, signed by Dr. W, stated the immediate cause of death as "acute respiratory failure;" the conditions which sequentially led to the immediate cause

as "chronic respiratory failure" and "pulmonary fibrosis-siderosis;" and the "underlying cause (disease or injury that initiated events resulting in death)" as "welding."

Dr. W's letter report of December 22, 1992, on "Pulmonary Consultants of Texas, P.A." letterhead contained his expert opinion as follows:

- In short, I do think that [decedent] died from respiratory failure, secondary to severe pulmonary fibrosis. It is my opinion that [decedent]'s pulmonary fibrosis was on the basis of siderosis, which is a type of interstitial fibrosis that is brought on by exposure to welding fumes over a longstanding period of years. I base this diagnosis on the fact that his clinical and radiographic pictures were highly consistent with such. He also had an open lung biopsy which did show "foci of histiocytes with brownish-black anthracotic pigment," which also would be highly typical and consistent with siderosis.
- Other causes of pulmonary fibrosis cannot be totally ruled out, but certainly, again, his clinical picture, radiograph, and biopsy are highly consistent with siderosis. Even if his pulmonary fibrosis were, in fact, precipitated by some other condition, there is no question in my mind that his exposure to dusts, fumes, etc., accelerated and aggravated his disease process.

In evidence was a medical definition of "siderosis" as "1. pneumoconiosis due to the inhalation of iron particles. 2. excess of iron in the blood. 3. the deposit of iron in a tissue." "Pneumoconiosis" was defined as "a condition characterized by permanent deposition of substantial amounts of particulate matter in the lungs, usually of occupational or environmental origin, and by the tissue reaction to its presence. It may range from relatively harmless forms of anthracosis or siderosis to the destructive fibrosis of silicosis. .

The carrier called (Dr. K), a specialist in preventive medicine and medical toxicology, who had not examined decedent but who had reviewed his medical records, and also introduced his report. The thrust of Dr. K's opinion was his disagreement with Dr. W that decedent had siderosis. Dr. K felt that decedent did not have siderosis but rather "had chest x-ray interstitial infiltrates related to accumulation of fluid secondary to his Vasotec medication and congestive heart failure." According to Dr. K, the lung biopsy report did not reveal rust colored pigmentation in the specimens which would indicate the deposition of iron particles. Further, maintained Dr. K, siderosis, a "benign" pulmonary condition which to Dr. K's knowledge has never caused death, would be apparent in the mid-portion of the lungs, not in the lower lobes where decedent's x-rays showed infiltrates characteristic of congestive heart failure. According to Dr. K, siderosis or "welder's lung" results from the combination of exposure to iron from the iron rod used in welding, together with guartz particles which infiltrate the central portions of the lungs. Dr. K stated that decedent would have been exposed to iron from "iron rods" and that flux is not used in arc welding. The record was developed, however, that decedent used the welding wire flux whose contents were described in the labels above set forth.

Dr. K described the cause of decedent's death as "multifold" and involving the combined effect of high blood pressure with secondary heart enlargement, together with kidney failure and complications from medications involving fluid retention. He did not believe the pulmonary fibrosis contributed in a major way to decedent's death. He said he also disagreed with Dr. W's opinion that even if the pulmonary fibrosis were precipitated by some other condition, decedent's exposure to dusts and fumes accelerated and aggravated his disease process. He did not feel the x-rays and biopsy report showed iron deposits or apparent substantial damage from deposits. In his written report Dr. K stated there was no evidence of "occupational deposits" in the biopsied tissue nor macrophages or giant cells which he said are frequently seen in reaction to pneumonoconiotic material and that the absence of such "tends to confirm that the cause of the fibrosis was not occupational." Dr. K agreed that decedent would have been exposed to "metal fumes" and to dust, and that welding can produce fumes which deposit in the lungs. Dr. K further agreed the chest xrays suggested pulmonary fibrosis but he attributed such to the tar from decedent's cigarette smoking. He later stated he was "not necessarily weighing smoking as the cause of [decedent's] terminal event."

The hearing officer concluded that decedent's death was causally connected with the nature and conditions of his work environment as an arc welder and was compensable under the 1989 Act. That conclusion was based upon numerous factual findings, the most pertinent of which found that decedent was exposed to welding fumes and gases containing manganese, silicon, titanium dioxides, carbon monoxide, carbon dioxide, ozone, and nitrogen oxides; that decedent's demonstrated fibrosis was causally related to his inhalation of substances in the welding fumes including carbon, manganese, aluminum, silicates, and also some free silica; that decedent was not provided with any respiratory mask and was exposed to welding fumes and gases containing manganese, silicon, titanium dioxides, carbon monoxide, carbon dioxide, ozone, and nitrogen oxides to a greater degree than the general population and that such exposure to such dusts, fumes, and gases resulted in decedent's death; that the exposure to noxious welding fumes for 25 years as a welder was the causative factor in decedent's death in that such exposure either directly caused his pulmonary failure or aggravated any underlying pulmonary condition and lead to decedent's death.

The carrier does not dispute any particular factual finding but, rather, globally asserts both the absence of and insufficiency of evidence that the decedent sustained an occupational disease. Carrier basically posits that claimant's case rests on the opinion of Dr. W which it characterizes as speculative and unsupported in the scientific literature while the opinion of its expert, Dr. K, is by contrast well grounded in the literature. In determining a "no evidence" challenge, we consider only the evidence and reasonable inferences which tend to support the finding, disregard all evidence and inferences to the contrary, and we should uphold the finding if any evidence of probative force supports it. An "insufficient evidence" point requires our review of all the evidence which supports and contradicts the finding, and we should uphold the finding unless we conclude it is so against the great weight and preponderance of the evidence as to be manifestly wrong and unjust. Texas Workers' Compensation Commission Appeal No. 92068, decided April 6, 1992.

The carrier cites us to Texas Workers' Compensation Commission Appeal No. 92187, decided June 29, 1992, for the 1989 Act's definitions of "injury" and "occupational disease," the claimant's burden of proof including the establishment of a causal relationship between the injury and the employment, and the requirement for expert or scientific evidence where the matter of causation is not in an area of common experience. Those fundamentals need not be repeated here. See also Texas Workers' Compensation Commission Appeal No. 91002, decided August 27, 1991, where we first addressed proof of occupational disease under the 1989 Act and observed that lay testimony of a claimant's working conditions may be considered along with the medical testimony connecting the condition to the injury. And see Texas Workers' Compensation Commission Appeal No. 92604, decided December 30, 1992, a case involving proof of mixed dust pneumoconiosis as an occupational disease, where we stated that what is required is evidence of probative force of a causal connection between the employment and the occupational disease, and that "the articulation of the probabilities of causation by a scientific expert is not the exclusive manner of proving the cause of an occupational disease." Compare Texas Workers' Compensation Commission Appeal No. 92202, decided July 6, 1992.

The testimony of claimant that decedent worked as a welder for employer for some 25 years together and the extent of the soot on decedent's face, hands, and clothing after work, the testimony of Mr. S concerning how smoky the workplace became when the doors were closed and the absence of respirators, "smokeaters," and fans, the evidence concerning decedent's use of welder's wire together with the information on the warning and contents labels accompanying that product, and the opinion of Dr. W that decedent's death resulted from respiratory failure caused by his pulmonary fibrosis which, in turn, resulted from his siderosis caused by his welding, or that his disease process was accelerated and aggravated by exposure to the welding fumes and dust, were "some evidence" of decedent's having sustained pulmonary fibrosis as an occupational disease from which he expired. Indeed, even the carrier's expert conceded such exposure and that the x-rays "suggested" pulmonary fibrosis. In considering whether the evidence is sufficient to uphold the decision, all the evidence is considered.

In Appeal No. 92187, *supra*, there was an absence of evidence concerning "noxious" fumes in the workplace and the medical evidence did not provide the necessary linkage or causal relationship to establish that the claimant sustained a compensable injury. In the present case, there was evidence of decedent's exposure as a welder over the course of 25 years to welding fumes, gas, and dust, as well as evidence that the fumes and gases from the welding wire or carbon steel flux could be dangerous to health and contained oxides of iron, manganese, silicon, and titanium dioxides, as well as fluorides, carbon monoxide, carbon dioxide, ozone, and nitrogen oxides. In Dr. W's opinion, the decedent had and died from "pulmonary fibrosis . . . on the basis of siderosis, which is a type of interstitial fibrosis that is brought on by exposure to welding fumes over a longstanding period of years." In his opinion, even if the pulmonary fibrosis were precipitated by some condition other than siderosis, decedent's exposure to the fumes and dust accelerated and aggravated his disease process. The hearing officer recognized that Dr. K disagreed with Dr. W's opinions.

However, the hearing officer chose to credit Dr. W's opinions which together with the other evidence, including claimant's testimony about Dr. H's opinion, sufficiently supported the hearing officer's conclusion. The carrier asserts that Dr. W's opinion was speculative and that the only substantive basis for it was what could be gleaned from decedent's x-rays and biopsy report while Dr. K's opinion, on the other hand, was based not only on his review of the medical records but also on some research he had once done in the scientific area and upon two research articles appended to his report.

As the trier of fact in a contested case hearing, the hearing officer is the sole judge not only of the materiality and relevance of the evidence but also of its weight and credibility. Section 410.165(a). The hearing officer resolves conflicts and inconsistencies in the evidence. <u>Garza v. Commercial Insurance Co. of Newark, N.J.</u>, 508 S.W.2d 701 (Tex. Civ. App.-Amarillo 1974, no writ). The hearing officer also judges the weight to be given expert medical testimony and resolves conflicts and inconsistencies in the testimony of expert medical witnesses. <u>Texas Employers Insurance Association v. Campos</u>, 666 S.W. 2d 286 (Tex. App.-Houston [14th Dist.] 1984, no writ); <u>Atkinson v. United States Fidelity Guaranty Co.</u>, 235 S.W.2d 509 (Tex. Civ. App.-San Antonio 1950, writ ref'd n.r.e.); <u>Highlands Underwriters Ins. Co. v. Carabajal</u>, 503 S.W.2d 336, 339 (Tex. Civ. App.-Corpus Christi 1973, no writ). The conflicting medical opinions were a matter for the hearing officer to resolve and we will not disturb the hearing officer's findings unless they are so against the great weight and preponderance of the evidence as to be manifestly unjust. <u>In re King's Estate</u>, 150 Tex. 662, 244 S.W.2d 660 (1951); <u>Pool v. Ford Motor Co.</u>, 751 S.W.2d 629 (Tex. 1986).

The decision of the hearing officer is affirmed.

Philip F. O'Neill Appeals Judge

CONCUR:

Joe Sebesta Appeals Judge

Lynda H. Nesenholtz Appeals Judge