



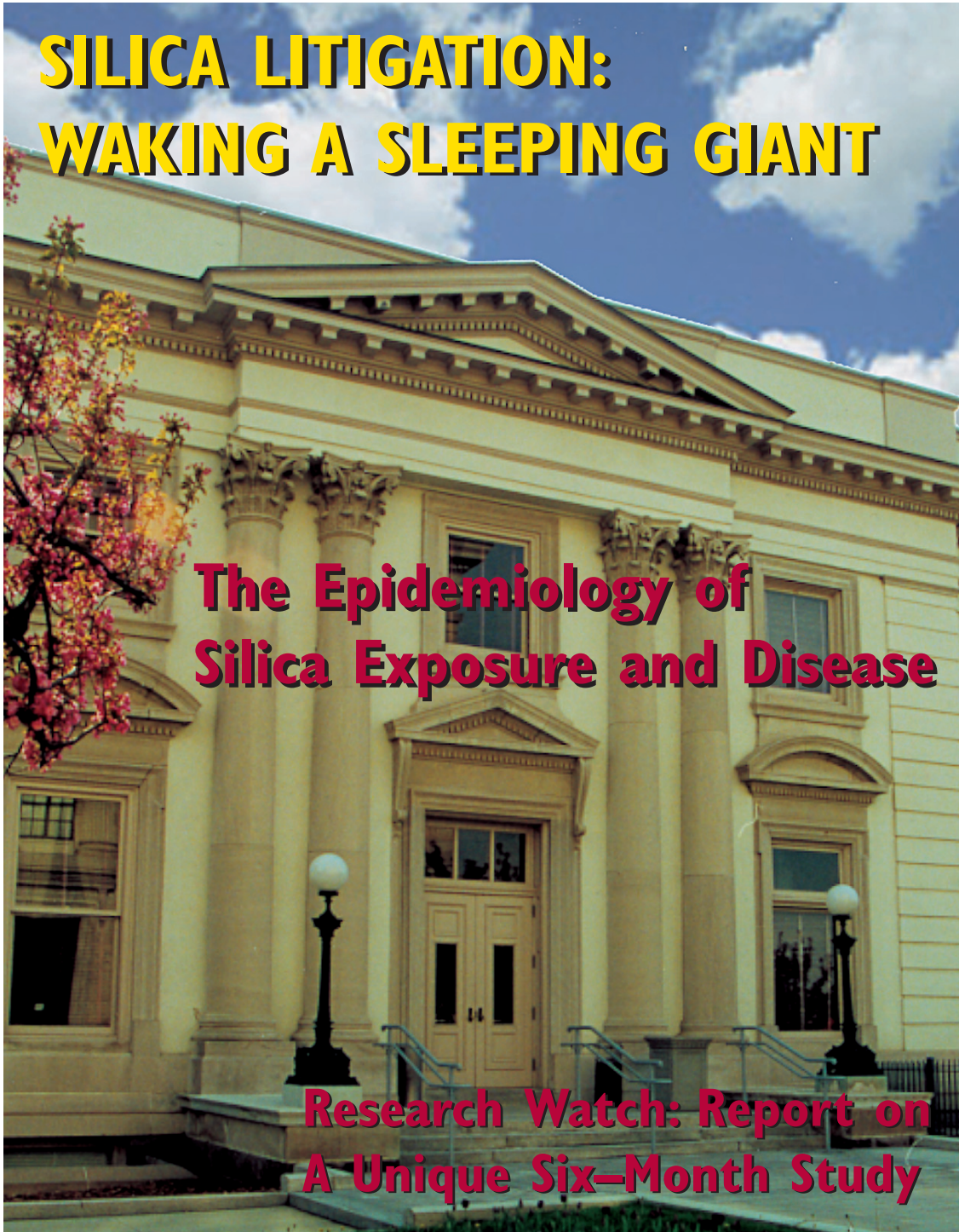
PREMIER ISSUE

SILICA

FROM THE FRONT LINES OF THE SILICA LITIGATION

PREMIER ISSUE

SILICA LITIGATION: WAKING A SLEEPING GIANT

A photograph of a grand, classical-style building with a portico supported by large columns. The building is light-colored, possibly stone or concrete, and has a pedimented roof. There are some trees with pink blossoms in the foreground on the left. The sky is blue with some clouds.

**The Epidemiology of
Silica Exposure and Disease**

**Research Watch: Report on
A Unique Six-Month Study**

ALSO IN THIS ISSUE:

- International Silicosis & Cancer Symposium Planned for Late October
- The Latest Silica Research in Medical Journals Around the World
- Appeals Courts Weigh the Validity of 'Sophisticated User' Defense



Silicosis Litigation: A Potential Sleeping Giant

by



**Michael J. Pietrykowski, Esq.
and**



Thomas J. Tobin, Esq.

See page 64 for author biographies

Ever since the United States Supreme Court published its opinion in *Urie v. Thompson* (1949) 337 U.S. 163, silicosis litigation has been an integral part of the rich tapestry of toxic tort litigation in this country. While it has not gained the notoriety of asbestos or tobacco litigation, silica dust exposure litigation has occupied a strong foothold in this area for the past fifty years. In fact, a number of events, recent and upcoming, will once again place the spotlight on silicosis litigation.

Crystalline silica is a generic term, which encompasses a number of minerals to include quartz, tridymite, and cristoballite. As quartz is the most common mineral in the earth's crust, there is no shortage of crystalline silica in the environment. Crystalline silica is commonly referred to as "silica dust", which has a number of industry applications. It also can be the ambient result of various industrial activities. Industrial settings where crystalline silica may exist are sandblasting, rock drilling, masonry work, underground construction, mining, foundry work, ceramics, pottery, detergent and soap manufacturing, stone cutting, glass manufacturing, agriculture, shipbuilding, railroad work, automotive repair, oil field work, and abrasive manufacturing. According to NIOSH studies, U.S. workers in these industries number over two million, with more than 100,000 in what are considered occupations "high-risk" for silica dust exposure. Steeland & Brown, "Silicosis Among Gold Miners: Exposure-Response Analyses & Risk Assessment," (1995) 85 *Am. J. of Public Health* 1372.

When workers inhale silica dust, scar tissue appears in the lungs, which surrounds the silica particles. This process is generally known as silicosis, the formation of nodular regions around the silica particles in the lungs. As the inhaled crystalline silica affects more lung tissue, breathing becomes increasingly difficult, chest pain develops, and death may occur as a result. Silicosis sufferers experience shortness of breath, fever, and cyanosis. Other pulmonary symptoms may develop as well. Some are incorrectly diagnosed as having pulmonary edema, pneumonia, or other lung diseases. NIOSH, "Silicosis in Sandblasters" (2002).

Three types of silicosis exist: chronic, accelerated, and acute.

Chronic silicosis occurs after 10 or more years of exposure to relatively low levels or concentrations of silica dust. In chronic silicosis patients, the latency period may take some time and will not develop until well after the initial exposure, over 25 years in some cases. The fibrotic changes in the lung may continue to develop over time even after the exposure has ceased. Chronic silicosis is further subdivided into simple and complicated silicosis. Simple silicosis is characterized by the presence of small, rounded fibrous nodules. They range in size from 3 to 6 mm and are not larger than 1 cm in diameter. Sufferers of simple silicosis generally do not exhibit respiratory symptoms unless they have a co-existent disease like emphysema or some other lung disease. Complicated silicosis have larger silicotic nodules and lesions in most cases greater than 1 cm in diameter. Complicated silicosis patients generally demonstrate shortness of breath and symptoms of increasing severity to include breathing failure. National Centre of Occupational Health Alert, "Crystalline Silica: Health Hazards and Precautions" (Feb. 1999).

Accelerated silicosis can occur from five to 10 years after exposure to high concentrations of crystalline silica. Although similar to the pattern of development of chronic silicosis, accelerated silicosis tends to develop from simple to complicated silicosis in a much faster time period. "Silicosis in Sandblasters," *supra*.

Acute silicosis is linked to extremely high concentrations of silica dust and can develop as quickly as a few weeks to five years from initial exposure. The radiological appearance and other features of acute silicosis are similar to that of pulmonary alveolar proteinosis. Symptoms include cough, weight loss, and fatigue. Death can occur within a few months if the exposure is significant enough. Traditionally, acute silicosis has been found in sand-blasters and drillers, especially those working with silica powder. As discussed below, a number of recent efforts have heightened interest in the potential causes of silicosis and the potential dangers of silica dust exposure. *NCOH Alert, supra*.

Early Beginnings

As early as the 1930s, the link between silica dust inhalation and silicosis was established. Silicosis gained national prominence with the death of approximately 700 workers dry drilling in tunnels in West Virginia. Markowitz & Rosner, “The Reawakening of National Concerns About Silicosis,” (1998) 113 *Public Health Reporter* 302. Given the amount of direct exposure and the timing of their deaths, these West Virginians died of acute silicosis, which created no statute of limitations problems. The limited latency period of acute silicosis raised no issues relative to latency or the discovery rule.

dubbed the “king of occupational diseases” at that time. See Markowitz & Rosner, *supra*, at 303. Throughout this time period, the great majority of silicosis plaintiffs stayed within various state run systems and away from the courts.

Increase of 3rd Party Claims (1980s-1990s)

Toward the end of the 1970s, plaintiffs and their counsel were becomingly increasingly dissatisfied with worker’s compensation awards and turned their sights to a new brand of silicosis litigation. Attorneys in Virginia, Texas, and Pennsylvania were among the first to file suit against manufacturers of silica products used in the various industries where potential

the traditional mining, sandblasting, and foundry industries. Plaintiffs emerged with silica dust exposure from work in ceramics, pottery, shipbuilding, railroad work, agricultural harvesting, and oil field drilling.

During this time period, various agencies, federal and state, further refined regulations concerning workplace safety and acceptable limits, which also aided the spread of silicosis litigation. The National Institute for Occupational Safety and Health, the Mine Safety and Health Administration, and the Occupational Safety and Health Administration continued to promulgate rules and regulations. These actions not only worked to increase occupational safety in these industries but also made

“A number of events, recent and upcoming, will once again place the spotlight on silicosis litigation.”

Until 1949, chronic and accelerated silicosis sufferers had difficulty meeting the applicable statute of limitations in light of the latency of their disease. The United States Supreme Court, with the *Urie v. Thompson* decision, recognized that the mechanical application of the statute of limitations, with no discovery rule, could lead to inequitable results for plaintiffs with diseases having a latency period longer than the applicable statutory period. The Supreme Court in *Urie* allowed a plaintiff, with silicosis that was latent beyond the duration of the statute of limitations period, to sue for inhalation injuries because the suit was initiated within a reasonable time after the discovery of the disease. This decision not only lead to the establishment of a discovery rule in most states, but it paved the way for future cancer and asbestos-related matters.

Steady Stream of Litigation (1950s — 1970s)

In the time period after the *Urie* decision and the state regulations that followed, there was certainly no shortage of silicosis patients and their lawsuits. However, the focus appeared to be on recovery almost exclusively against employers. In the 1950s to the 1970s, more than 95 percent of the silicosis claims were in the worker’s compensation arena. Silicosis was

plaintiffs were exposed to silica dust. The basis for liability as against those manufacturing and supplying silica products to employers was and remains similar to that of asbestos and other similar substances. Most cases involved theories of failure to warn and defective design and manufacture.

Starting with a \$1 Million verdict in favor of a sand blaster-industrial painter (*Flowers v. Specialty Sand Co.*), Texas became and continues to be a popular jurisdiction for silicosis litigation, especially for sandblasting plaintiffs. There were also groups of plaintiffs claiming silica exposure in Pittsburgh, Pennsylvania, and Lynchburg, Va., in the foundry and steel industry. See Appleton, “Third-Party Claims Grow in Silica Dust Cases,” *National Law Journal*, August 29, 1983.

In light of the trend of third-party claims and also the epidemiological evidence linking silicosis and silica dust, silicosis litigation thrived during the 1980s and 1990s with a steady stream of plaintiffs. The trend in this area of litigation in this time period was to constantly push the envelope to discover new areas and industries where silica dust exposure is prevalent. As these decades came to an end, silicosis litigation had spread into industries beyond

compliance more difficult for employers and manufacturers. In turn, these more difficult standards have aided plaintiffs in arguing breach of the duty to warn and also defective design and manufacture.

Toward the end of the 1990s, some favorable statistics indicated a drop in the number of silicosis-related deaths. NIOSH reports indicate that mortality rates from silicosis declined from over 1,000 per year in the late 1960s to fewer than 250 per year in the mid-1990s (1994-1996). See *BNA Occupational Safety & Health Daily*, March 21, 2000. While this news is encouraging, it does not indicate an elimination of silicosis deaths, but rather a steady downward trend in deaths that are confirmed silicosis deaths. It also does not track specifically whether diagnoses of silicosis are decreasing at a greater or lesser rate. In recent literature, as will be discussed below, the risk of silica dust exposure is still one of “substantial” concern for NIOSH. *Id.*

Present & Future (2000 & Beyond)

Some recent events and controversy will likely steer silicosis litigation into the forefront of toxic tort litigation over the next few years. As discussed below, there have been recent liti-

Silicosis Litigation continued from page 3

gation matters and increased vigilance by NIOSH and other agencies may augment the legal toolbox of plaintiffs claiming illness from silica dust exposure.

Two recent developments in Texas have indicated that silicosis litigation is alive and well. First, in *Tompkins v. U.S. Silica Company* (2001) Case No. E-162,276 (Texas), a jury in Jefferson County District Court awarded the largest Texas silicosis verdict, approximately \$7.6 Million, in a wrongful death case due to respiratory failure from emphysema and silicosis. The decedent's exposure period was from 1968 to 1977 as a sandblaster, and the jury found against U.S. Silica on a failure to warn theory. This verdict is significant as it indicates the potential willingness of juries to impose liability on failure to warn theories in the 1960s and 1970s. With the latency of silicosis, potential plaintiffs will be around for quite some time.

The other notable Texas case is set for oral argument with the Texas Supreme Court on Oct. 16, 2002. This case, *Humble Sand & Gravel, Inc. v. Gomez, Tex.*, No. 01-0652, will give the Texas Supreme Court the opportunity to address a hot topic of late in toxic torts – the sophisticated purchaser defense. Under the sophisticated purchaser defense, a manufacturer who sells a chemical or some other potentially hazardous substance to a customer that knows or should know of the dangers associated with that material is not liable if the purchaser fails to adequately protect its employees from harm caused by the product. This defense, recognized by a number of states, is gaining increasing disfavor among plaintiffs' attorneys who believe that relieving the seller of a duty to warn creates a dangerous precedent. Chemical manufacturers, on the other hand, rely on this defense, because of the difficulty and added costs of having to control the activities of downstream customers. Many legal commentators believe that the Texas Supreme Court will use this opportunity to further erode the sophisticated purchase defense and increase potential liability for defendants in product liability actions. Should this occur, plaintiffs will have further

ammunition in battling the sophisticated purchaser defense asserted by manufacturers and suppliers of silica products.

Current Health Issues Related to Silicosis

Recent studies and those currently pending have the attention of those involved in silicosis litigation. There are a number of key health issues that could affect the look of silicosis litigation for years to come. The following are a few of these items of interest.

First, in 2000, NIOSH issued three reports that indicated that the latency period for silica miners who exhibit no illness, even 15 years after exposure, cannot rule out possible adverse effects. According to reports resulting from recent studies in Berkeley Springs, W.Va., Mill Creek, Okla., and Columbia, S. C., NIOSH issued the opinion that latency periods for silica-exposed workers can reach as long as 35 to 40 years. This was evidenced by examination of workers who have not been diagnosed with silicosis, but exhibit radiological findings consistent with silicosis. As a result, the potential pool of plaintiffs will remain significantly large for at least the next decade, given this information. See *BNA Occupational Safety & Health Daily*, June 13, 2000.

Second, there have been increasing efforts by NIOSH and the World Health Organization to link silicosis with other diseases. For example, researchers have consistently attempted to link silicosis with lung cancer, pulmonary tuberculosis, and other airway diseases as well as auto-immune diseases (to include lupus, chronic renal disease, and rheumatoid arthritis). See *BNA Occupational Safety and Health Daily*, May 20, 2002. Proponents of these links between silicosis and other diseases (especially lung cancer) currently have many critics. See Regis, "Comment: From the Sandbox to Sandblasting: Regulation of Crystalline Silica" (1999) 17 *Pace Environmental Law Review* 207. Many believe that the epidemiological link between silicosis and lung cancer in the absence of lung fibrosis "must still be considered scanty and inconsistent, although biologically plausible." Hardy & Weill, "Crystalline Silica: Risks & Policy" (1995) 103 *Environmental Health Persp.* 152, 153. As a result,

even though the epidemiological evidence is not firmly linking silicosis and a number of other diseases and conditions, the move is clearly afoot to do so and may have a significant impact on silicosis litigation.

In addition to the focus of NIOSH and other agencies to further study the relation of silicosis to other diseases, NIOSH is also not only conducting studies in new areas of industry but also forming a grass roots campaign to teach epidemiology at the high school level. "Silicosis in Sandblasters," *supra*. According to NIOSH studies, industries such as the fabricated metal products industry and various construction industries have not caught up to the compliance standards of mining and other more traditional silica exposure industries. As a result, these industries may be an increasing target for the plaintiffs' bar as silicosis litigation further evolves. In addition, NIOSH has begun a program to increase awareness of the study of epidemiology and has adopted silicosis as its case study for use in high schools. This will certainly increase awareness of silicosis and may affect the litigation related to it.

Although litigation involving injuries related to inhalation of silica dust has been around since the 1940s, it continues to evolve today. With the recent verdict and pending decision regarding the sophisticated purchaser doctrine in Texas and also the evolving trend to link silicosis to lung cancer and other disease, silicosis litigation is likely to continue for quite some time. Depending on the results of pending studies, this area of litigation could flourish and become as recognizable as its asbestos relative. The next twelve months will dictate much of the future for this field.

Michael J. Pietrykowski is a partner in the San Francisco office of Gordon & Rees, LLP, and is the Chairman of the firm's Toxic Tort & Environmental Law Practice Group. He represents wide array of industry clients in most areas of toxic tort litigation to include cases involving chemicals, asbestos, and mold exposures.

Thomas J. Tobin is a senior associate practicing in the San Diego and Los Angeles offices of Gordon & Rees, LLP. He specializes in representing clients against claims of personal injury as well as property and business damage from alleged exposure to chemicals, hazardous substances, pesticides, mold, and other substances.

