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Beryllium: The Changing Face of Toxic Tort Litigation in Pennsylvania

I. An Introduction to Beryllium

Human exposure to beryllium¹ is emerging as a breeding ground for new toxic tort litigation in the United States. The United States is the leading world consumer and processor of beryllium products.² Beryllium is used in a variety of forms, including metal or ceramic.³ For example, nuclear weapons, nuclear reactors, and x-ray machines are just some of the places where beryllium has been found to be valuable.⁴ Beryllium is unique in its versatility of uses, lack of fatigue, and stability.⁵ Beryllium is beneficial to the atomic energy and other industries because of its ability to reflect and absorb neutrons, resistance to oxidation, and superiority to glass and other metals to transmit x-rays.⁶ Beryllium is highly advantageous to the aerospace industry because of its distinct strength, low density, extremely high melting point and light weight.⁷

Much of beryllium's history in America stems from World War II and the Cold War era, when the U.S. Government was the foremost purchaser in the beryllium industry.⁸ Recently, the market has expanded

1. See *The Agency for Toxic Substances and Disease Registry: Fact Sheet on Beryllium* (November 9, 2003), available at <http://www.atsdr.cdc.gov/tfacts4.html> (last visited Nov. 9, 2003) [hereinafter ATSDR]; see also Department of Energy: Chronic Beryllium Disease Prevention Program; Final Rule, 64 Fed. Reg. 235,68855 (Dec. 8, 1999) (codified at 10 C.F.R. pt. 850). 48 Am. Jur. Proof of Facts 2d § 401. Beryllium Poisoning (2004). In a crystallized form beryl can take the form of emeralds, aquamarine, or the semi-precious stones. Beryllium is a natural metal found in beryl and bertrandite rock. Brazil is the leading producer of beryllium.

2. 64 Fed. Reg. 235, *supra* note 1, at 68855.

3. *Id.* at 68854. There are now theories emerging that the form of beryllium can indicate the level of toxicity. See Terry Gordon, *et al.*, *Beryllium: Genotoxicity and Carcinogenicity*, 533 MUTATION RESEARCH 99-105 (2003).

4. ATSDR, *supra* note 1; see also 64 Fed. Reg. 235, *supra* note 1, at 68855.

5. See 64 Fed. Reg. 235, *supra* note 1, at 68855-6.

6. See *The Columbia Encyclopedia*, 6th Ed. (2001), available at www.bartleby.com/65/be/berylliu.html (last visited Jan. 23, 2004). Beryllium is the second lightest of all metals.

7. See 64 Fed. Reg. 235, *supra* note 1, at 68855.

8. See 42 U.S.C.A. §7384 (2000); see also *Morgan v. Brush Wellman, Inc.*, 165 F. Supp. 2d 704, 708 (E.D. Tenn. 2001). "The United States War Department began

to include other purchasers, beyond the aerospace and weapons industries, looking for a new material to produce switches for automobiles or computers, molds for plastic, glass and other metals, golf clubs, bicycles, and even dental appliances.⁹ Beryllium is returning to the market given this new demand for a lighter and stronger metal.

The general population in the United States is exposed daily to low levels of beryllium in the air, food, and water, but workers associated with the mining and production of beryllium can be exposed to unhealthy levels of beryllium dust.¹⁰ Scientific data suggests that people living near production facilities or uncontrolled hazardous waste sites are also vulnerable to detrimental exposure levels.¹¹ Recent allegations of overexposure have sparked litigation in the jurisdictions of the three main production facilities in the United States. Clusters of litigation have begun in Ohio,¹² Tennessee,¹³ and Pennsylvania.¹⁴

Although beryllium exposure is relatively new to tort litigation, it is not entering the courts without significant precedent.¹⁵ The cases

purchasing beryllium oxide and beryllium metals from Brush Wellman and its competitor.”

9. See 64 Fed. Reg. 235, *supra* note 1, at 68856.

10. ATSDR, *supra* note 1. The general population is not exposed to unhealthy levels of beryllium.

11. ATSDR, *supra* note 1.

12. See *Jones v. Brush Wellman, Inc.*, 2000 WL 33727733 (N.D. Ohio 2000); *Norgard v. Brush Wellman, Inc.*, 766 N.E.2d 977 (Ohio 2002); *Renwand v. Brush Wellman, Inc.*, 778 N.E.2d 654 (Ohio Ct. App. 2002); *Wilson v. Brush Wellman, Inc.*, 2002 WL 31320323 (Ohio Ct. App. 2002).

13. See *Morgan v. Brush Wellman, Inc.*, 165 F. Supp. 2d 704 (E.D. Tenn. 2001); see also *Byrd v. Brush Wellman, Inc.*, 753 F. Supp. 1403 (E.D. Tenn. 1990).

14. See *Branco v. Cabot Corp.*, 2002 WL 1833343 (E.D. Pa. 2002); *Cull v. Cabot Corp.*, 2001 WL 577302 (Pa. Com. Pl. 2001); *Debiec v. Cabot Corp.*, 352 F.3d 117 (3d Cir. 2003); *Dondore v. NGK Metals Corp.*, 152 F. Supp. 2d 662 (E.D. Pa. 2001); *Guldner v. Brush Wellman Inc.*, 2001 WL 856699 (E.D. Pa. 2001); *Resser v. NGK Metals Corp.*, 247 F. Supp. 2d 626 (E.D. Pa. 2003); *Russo v. Cabot Corp.*, 2002 WL 31163610 (E.D. Pa. 2002); *Vitalo v. Cabot Corp.*, 212 F.R.D. 478 (E.D. Pa. 2002).

15. There are a few beryllium cases that were filed in Pennsylvania before 1998. See *Heck v. The Beryllium Corp.*, 226 A.2d 87 (Pa. 1966). The court held that the jury could have found that the defendant should be held to the minimum standard even if the defendant did not exceed the recommended standard by the Atomic Energy Commission. The case was reversed and remanded. See also *Thomas v. Workman's Compensation Appeal Bd.*, 527 A.2d 209 (Pa. Commw. 1987). The court held the 120-day statute of limitations begins to run when the claimant knows or has constructive knowledge of his disability resulting from an occupational disease. The workman's compensation referee found that the claimant was not disabled from beryllosis and therefore was not required to notify his employer within 120 days of his constructive knowledge of his illness. See also *Holt v. Sunray Electric, Inc.*, 142 A.2d 509, 511-12 (Pa. Super. Ct. 1958). The plaintiff brought suit under the Pennsylvania Occupational Disease Act claiming that he was exposed to zinc beryllium silicate during his employment as a janitor. The court held that the plaintiff's case was barred by the statute of limitations because it was not filed within three years of the time that he was employed in the capacity where he would have been exposed to the harmful material. *Id.* at 512. See *Koslop v. Cabot Corp.*, 654 F.

involving beryllium exposure imitate the prolific asbestos litigation that has been a burden on the American court system for decades.¹⁶ The nature of beryllium's latency period, evidentiary difficulties for proof of causation, and the lack of substantial scientific studies¹⁷ of beryllium's health effects, mimic the asbestos litigation. This begs the question of whether beryllium will rival asbestos as the new lucrative toxic tort.

This comment examines beryllium exposure litigation to date and compares it to the complex asbestos litigation. Although this comment will discuss other regions of the United States that have managed, or are presently dealing with beryllium litigation, the focus of this paper will be on the projected effect that beryllium litigation will have on the court systems in Pennsylvania. This comment will also develop a comparison between several jurisdictions' approach to beryllium litigation and Pennsylvania's general approach, thus far, in regards to beryllium exposure cases.

II. Background Information on Beryllium

A. *An Overview of Health Problems Associated with Exposure to Beryllium*

There are two main illnesses associated with beryllium exposure. Acute Beryllium Disease is an immediate reaction to beryllium where the

Supp. 1271, 1275 (M.D. Pa. 1987). The court held that a failure of a purchasing company to continue a medical monitoring program developed by the selling company alone is not an intentional tort even if there is a known substantial risk to the employees' health. The defendant motion for summary judgment was granted. *See also* Sheridan v. Cabot Corp., 2003 WL 22999256 (E.D. Pa. 2003), *aff'd* Sheridan v. Cabot Corp., 2004 WL 2360990 (3d Cir. 2004).

16. Department of Labor, Occupational Safety and Health Administration: Air Contaminants 57 Fed. Reg. 26002, 26462 (June 12, 1992) (codified at 29 C.F.R. §§ 1910, 1915, 1917, 1918, 1926, 1928) (2005). The number of asbestos lawsuits filed was estimated to be over 100,000 in 1992.

17. The Department of Labor, Occupational Safety and Health Administration: Occupational Exposure to Beryllium; Request for Information 67 Fed. Reg. 70707 (Nov. 26, 2002) (codified at 29 C.F.R. § 1910) (2005). OSHA, unsatisfied with the Department of Energy's attempt to complied evidence on beryllium, issued a request for information, to be received by February 24, 2003, related to beryllium exposure and adverse health effects of beryllium to supplement its own information. The agency declared that "the information received in response to this document will assist the Agency in determining an appropriate course of action regarding occupational beryllium exposure." In relation to Chronic Beryllium Disease ("CBD"), the document also states that measurements of dust levels may not be the most accurate way to predict the incidence of CBD. "Particle size, surface area, number of particles, solubility and the chemical form of beryllium involved may all be relevant to the development of the disease." Nevertheless, there is little known about CBD and its precise foundation for the onset of the disease. *Id.* at 70708.

symptoms resemble pneumonia or bronchitis.¹⁸ The number of people affected by this disease has significantly diminished due to the increased protection from exposure to beryllium from neighboring production facilities.¹⁹ Also, due to growing awareness of the health risks associated with exposure to beryllium dust and the recent workplace regulations that have been developed since beryllium production began, there has been a decrease in the number of individuals having an acute reaction to beryllium.²⁰ The body can recover relatively quickly from this type of exposure with treatment.²¹

The second main illness associated with beryllium is chronic beryllium disease (hereinafter CBD),²² also known as beryllosis. CBD is a delayed reaction to beryllium, with latent health effects that can occur in 1% to 6% of people exposed and who have an allergic sensitivity to beryllium.²³ The only known way to contract CBD is for a sensitized person to inhale airborne beryllium.²⁴

The symptoms of CBD include: shortness of breath, anorexia, chest pain, lethargy, and also right side heart enlargement in advanced cases.²⁵ Scientific evidence has not produced an equation (i.e. a maximum exposure level without incidence of CBD in the general public, including

18. Research from the National Jewish Medical and Research Center (2003), available at www.nationaljewish.org/medfacts/beryllium_medfact.html last visited Oct. 31, 2003) [hereinafter NJMR].

19. *Id.*

20. *Id.*

21. *Id.*

22. J.E. SCHMIDT, M.D. ATTORNEYS' DICTIONARY OF MEDICINE, Vol. 2, C-257 (1999). Chronic Beryllium Disease: (Beryllosis) a chronic hypersensitivity disease resulting from exposure to beryllium.

A granulomatous form of lung disease eventually develops, marked either by chronic inflammatory lesions or fibrotic, calcified nodules in the lung tissue. Enlargement of the liver and the right ventricle of the heart occur in advanced cases. Once established, the disease is progressive, even in the absence of continued exposure to beryllium.

23. NJMR, *supra* note 18.

24. See 64 Fed. Reg. 235, *supra* note 1, at 68854. Copper beryllium (CuBe) in its finished form does not pose a health risk from contact with the eye, skin or ingestion. See *Brush Wellman Safety Facts: Potential Health Effects From Exposure To Copper Beryllium Alloy*, available at [www.brushwellman.com/. . .c49ba63c4009d14385256b10006bb1d3/23ad4d382975001f85256b10006d9ed3/\\$FILE/SF100.pdf](http://www.brushwellman.com/. . .c49ba63c4009d14385256b10006bb1d3/23ad4d382975001f85256b10006d9ed3/$FILE/SF100.pdf) (last visited Jan. 23, 2004). In relation to the eye or skin contact, beryllium is no more harmful than any other foreign object in the eye, in a cut or beneath the surface of the skin. Beryllium, dust or powder, may be ingested by eating, drinking, smoking or nail biting but there are no known adverse health effects. However, inhalation of beryllium dust is extremely harmful, if not fatal, to the percentage of the population who are sensitive to beryllium. A person with CBD has inflamed lungs causing a restriction of the oxygen transfer from the lungs to the blood stream.

25. ATSDR, *supra* note 1; see also, NJMR, *supra* note 18. The internet facts sheet also states that weight loss, fevers and night sweats are among the signs and symptoms of beryllium disease.

those who are beryllium sensitive) or a way to apply predictions which would provide conclusive evidence as to whether a sensitized person will develop CBD or have a remote allergic reaction when exposed to a specific level of beryllium exposure. General public exposure levels have been shown to be as low as .00003-.0002 $\mu\text{g}/\text{m}^3$ in the air.²⁶ Even an exposure level less than general exposure for a brief amount of time can lead to CBD in those people that have beryllium sensitivity.²⁷

Preliminary scientific data suggests that portions of the population (approximately 1-15%) are sensitive to beryllium.²⁸ The gene marker, HLA-DPB^{E69} has been found in 1-12% of the beryllium workers had been tested for sensitivity, and of those tested, 36-100% workers were diagnosed with CBD.²⁹ This research is the leading evidence to show there may be a consistent link between beryllium sensitivity and a genetic marker that would improve predictions of susceptibility to the diagnosis of CBD after exposure to this metallic dust.

The sensitization test for beryllium is a blood test called, the beryllium lymphocyte proliferation test, (hereinafter BeLPT).³⁰ This test

26. ATSDR, *supra* note 1. These low levels of beryllium exposure are unlikely to produce detrimental health effects in the general public.

27. NJMR, *supra* note 18. One particular study was conducted at the Department of Energy's Rocky Flats facility in Colorado. See Kathleen Kreiss, et al., *Epidemiology of Beryllium Sensitization and Disease in Nuclear Worker*, AM. REV. RES. DIS. Vol. 148, 985-91 (1993). This case study tested workers ranging from management to technicians at the Department of Energy's Rocky Flats plant. Of the 223 beryllium machinists that were tested, 21 cases of CBD were recorded for an incidence percentage rate of 9.4 (cases reported per 100 workers tested). Of the 1,903 administrative employees there were 23 cases reported for an incidence percentage rate of 1.2. Also, there were 1,396 professional employees tested with an indication of 15 reported cases of CBD, giving an incidence percentage rate of 1.1. These numbers are indicative of the relative exposure rates that each of the particular workers would have encountered during their span and scope of employment at the Rocky Flats facility. Administrative and professional employees would generally have reduced exposure in comparison to other employees, who were among the machines and directly processing the materials. Kreiss and her research colleagues concluded that workers directly involved with the production of beryllium metal (rather than beryllium ceramic) had the highest prevalence of CBD. The Kreiss research team cited to another study by Eisenbud and Lisson which had recorded data from the plant in Reading, Pennsylvania. 67 Fed. Reg. 235 at 68859. See Eisenbud and Lisson, *Epidemiological Aspects of Beryllium-Induced Non-Malignant Lung Disease: A 30-Year Update*, at 64 Fed. Reg. 235, *supra* note 1, at 68859-61. In this study, 4,000 workers tested with 51 cases of CBD reported giving an incidence rate of 1.3 people exposed per 100 workers.

28. NJMR, *supra* note 18.

29. Center for Disease Control, Ainsley Weston, Kathleen Kreiss, Michael Andrew and Erin McCanlies, *Human Genome Epidemiological Network a fact sheet on the HLA-DBB1*E69 and Chronic Beryllium Disease*, available at www.cdc.gov/genomics/hugenet/factsheets/FS_Beryllium.htm (last visited Jan. 23, 2004).

30. NJMR, *supra* note 18. The patient's blood or lung washing is tested for the level of sensitization to beryllium. See also 10 C.F.R. § 850.3(a)(4) (2005). "Beryllium-induced lymphocyte proliferation test is an in vitro measure of the beryllium antigen-

is helpful to determine a person's sensitivity level to beryllium, but like other blood or urine tests, the test does not indicate the time frame of the last exposure or the level of any exposure.³¹ Although blood tests are more frequently used, CBD may also be detected with a chest x-ray, lung biopsy or a pulmonary function test.³²

Physicians look for calcium deposits that have developed on the lung where the beryllium binds to peptides on the mucosal surface of the lung.³³ The gradual response to the allergic reaction is a granuloma,³⁴ or a nodule, that develops in response to the infection.³⁵ However, given the variation in human reaction to beryllium, the progression of the disease may be gradual or rapid and there is no definitive prediction as to when the latent health effects will surface.³⁶

B. Regulation of Beryllium

With the development of the United States Nuclear Weapons Program, the Department of Energy (hereinafter DOE) has been designated with the authority to regulate beryllium given its use in the nuclear energy industry.³⁷ The DOE assumed this duty from its predecessor the Atomic Energy Commission (hereinafter AEC) and choose to follow the AEC's level of 0.2 $\mu\text{g}/\text{m}^3$.³⁸ The DOE has

specific, cell-mediated immune response.”

31. ATSDR, *supra* note 1.

32. NJMR, *supra* note 18.

33. See 64 Fed. Reg. 235, *supra* note 1, at 68856.

34. *Id.*

35. STEDMAN'S MEDICAL DICTIONARY 743 (26th ed. 1995.) Beryllium Granuloma: “a sarcoid-like granulomatus reaction to exposure to inhaled beryllium, or skin cuts by fluorescent lamps.”

36. See 64 Fed. Reg. 235, *supra* note 1, at 68860.

37. 42 U.S.C.A. § 2201(i)(3) (2002). The Atomic Energy Commission has the authority to “govern any activity authorized pursuant to this chapter, including standards and restrictions governing the design, location, and operation of facilities used in the conduct of such activity, in order to protect health and to minimize danger to life and property.” See also 42 U.S.C.A. § 2201(p)(2003). The AEC has the ability to “make, promulgate, issue, rescind, and amend such rules and regulations as may be necessary to carry out the purposes of this chapter.”

38. See 64 Fed. Reg. 235, *supra* note 1, at 68854. The regulated beryllium standard in 1949 was 2 $\mu\text{g}/\text{m}^3$ and not .2 $\mu\text{g}/\text{m}^3$. This is most likely a typo. There is no distinction in the text of the Federal Register whether this standard is for the workplace setting or whether this standard was set for the air in the area neighboring the plant. See *Heck v. The Beryllium Corp.*, 226 A.2d 87, 89 (Pa. 1966). The court held that there was a tentative level set by the AEC in 1950 noted to be .1 $\mu\text{g}/\text{m}^3$. See also Morgan, 165 F. Supp. 2d at 710-711. The court details the history behind the 2.0 $\mu\text{g}/\text{m}^3$ level adopted by the AEC. In 1949, Mr. Merrill Eisenbud, a scientist employed with the AEC, was sent to Brush Wellman's Lorain Plant in Ohio to collect data. The AEC was aware of a number of neighborhood exposures cases surfacing near the Lorain plant. This plant had data available regarding employee exposure and the rate of emission but there was no existing epidemiological research on beryllium and its incidence of Chronic Beryllium Disease in

promulgated regulations that provide a beryllium measure of $0.2 \mu\text{g}/\text{m}^3$ triggers certain required precautions and control measures.³⁹

For instance, the safety precautions include: the use of latex gloves, the changing of clothing after a shift, vacuuming the workspace area, and the use of respirators and vented hoods.⁴⁰ Furthermore, the DOE established a no-fault compensation fund for workers that have been exposed to beryllium during the course of their employment.⁴¹ Potential plaintiffs in Pennsylvania may also be eligible for compensation under the Pennsylvania Occupational Disease Act.⁴²

Although the DOE alone has the authority to regulate beryllium,

workers to which Eisenbud could refer. Therefore, he relied on data from lead that was known to be toxic to humans. Eisenbud recommended an occupational level of $2.0 \mu\text{g}/\text{m}^3$ to be adopted by the AEC because it appeared that there was a high toxicity incidence of beryllium in the plant employees. This level was a mere fraction of the other standards adopted for toxic metals. In 1959, the American Conference of Governmental Industrial Hygienists adopted the same level of $2.0 \mu\text{g}/\text{m}^3$. Also, Eisenbud recommended a standard of $0.01 \mu\text{g}/\text{m}^3$ for the air quality in the area neighboring the plant. Eventually, the AEC permanently adopted the $2.0 \mu\text{g}/\text{m}^3$ occupational level even though OSHA was aware that CBD could occur in sensitive individuals in levels below this standard. Mr. Eisenbud admitted to the arbitrary nature of the regulatory level but that "it has been recommended by the Commission to its contractors as being the most reasonable tentative level in the judgment of a number of investigators who are familiar with the disease."

39. See 10 C.F.R. § 850.23 (2005).

40. See *Morgan*, 165 F. Supp. 2d at 714; see also 10 C.F.R. § 850.27 (hygiene facilities and practices), § 850.28 (respiratory protection), § 850.29 (protective clothing and equipment), § 850.30 (housekeeping) and § 850.34 (medical surveillance).

41. 42 U.S.C.A. § 7384 (2002). The U.S. Energy Employees Occupational Illness Compensation Program was established to compensate nuclear energy workers after World War II for their exposure to radioactive substances and beryllium. By developing this no-fault compensation program, the government was acknowledging that it exposed metals workers to health risks when it produced and contracted with private companies to use beryllium in the production of nuclear weapons. See 42 U.S.C.A. § 7384(a)(8) (2002). The worker must show that they were employed at an atomic weapons employer facility (a government facility) or a beryllium vendor company listed in the regulation. Congress established the compensation to give injured workers a means for procuring compensation without an elaborate fact-finding process. The Act compensates the worker, on a one-time basis, for the costs of medical monitoring or an amount not to exceed \$150,000 for the use towards medical expenses and transportation costs. See also 42 U.S.C.A. § 7385 (2003). The amount received by a worker is "offset" by any amount received from a lawsuit settlement or award. Plaintiffs are not to receive tort compensation in excess of the government's compensation. However, the act does not consider Workman's Compensation Claims additional tort compensation. All of the deadlines have passed to file for this compensation.

42. See 77 P.S. § 1201 (1939). This act establishes compensation for workers for their injuries that are the slow and gradual result of exposure to a toxin during employment, rather than a single event or incidents regularly covered by Workman's Compensation claims. See *Plaughter v. American Viscose Corp.*, 30 A.2d 376 (Pa. Super. Ct. 1943). Beryllium was not in the initial list of illnesses covered but was added in an amendment. 77 P.S. § 1208 (2005). See also *Szoke v. Johnstown Coal & Coke Co.*, 5 Pa. D&C.2d 108, 113 (Pa. Com. Pl., Cambria County, 1995).

other governmental organizations and agencies have released their own advisory levels. The National Institute for Occupational Safety and Health recommends an exposure limit of no greater than $0.5 \mu\text{g}/\text{m}^3$.⁴³ The Department of Occupational Safety and Health Administration has also held that the permissible exposure limit of beryllium should be $2.0 \mu\text{g}/\text{m}^3$ in an 8-hour time weighted average.⁴⁴ The Environmental Protection Agency restricts the level of beryllium released into the air to $.01 \mu\text{g}/\text{m}^3$.⁴⁵

The Department of Energy in its regulation of beryllium has promulgated that the beryllium employers must provide medical surveillance which includes periodic testing and reporting of abnormal results of tests of workers found to have a positive BeLPT or health problems associated with beryllium exposure.⁴⁶ The Department of Energy has also provided a way for workers to reduce their exposure to beryllium by offering the employee temporary or permanent removal from their jobs to an alternative position without reduction to the employee's earnings, benefits or seniority pending a final medical determination by health officials.⁴⁷ This test would be used to determine which metal workers have beryllium sensitivity.⁴⁸ If the worker is found to be sensitized to beryllium and the employee is exposed to high levels of the toxic airborne beryllium during the course of their task at the production facility, then the worker should be excluded from jobs requiring him to be near high exposure levels of airborne beryllium.⁴⁹

III. Analysis

A. *Beryllium in Relation to Other Toxic Torts*

Exposure to asbestos has been projected to have affected 1.3 million Americans in the course of performing their jobs.⁵⁰ An estimated

43. See 64 Fed. Reg. 235, *supra* note 1, at 68854.

44. 64 Fed. Reg. 235, *supra* note 1, at 68854; see *Renwand*, 778 N.E.2d at 655-6 (Ohio Ct. App. 2002); see also OSHA's overview of the limits allowable under their standards, available at www.osha.gov/SLTC/beryllium/index.html (last visited Jan. 23, 2004).

45. 64 Fed. Reg. 235, *supra* note 1, at 68858. See also the Environmental Protection Agency's fact sheet on Air Toxins: Beryllium, available at www.epa.gov/region4/air/airtoxic/61c.htm (last visited Jan. 23, 2004). This regulation has limited jurisdiction to Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee.

46. 10 C.F.R. § 850.34 (2005).

47. 10 C.F.R. § 850.35 (2005).

48. Gary E. Marchant, *Genetics and Toxic Tort*, 31 SETON HALL L. REV. 949, 977-78 (2001).

49. *Id.*

50. See www.osha.gov/SLTC/asbestos/index.html (last visited Jan. 23, 2004).

100,000 lawsuits involving asbestos exposure were filed as of 1992.⁵¹ In comparison, there were approximately 10,000 people tested for beryllium sensitivity as of 1999 for exposure during their employment with the DOE or a DOE contractor.⁵² Since beryllium litigation is still in its infancy, the number of lawsuits filed is presently low in comparison to the number of potential plaintiffs exposed to beryllium.⁵³ However, there are some unique differences in the people who could have potentially been exposed to asbestos when compared to people that may have been exposed to beryllium.

Asbestos was widely used in general industrial work,⁵⁴ construction⁵⁵, and on shipyards.⁵⁶ On the other hand, when the health effects of beryllium were not yet fully understood, beryllium was primarily produced in the United States for more limited purposes, i.e., nuclear weapons, nuclear reactors, and aerospace engineering.⁵⁷ As a result, there were many fewer workers handling beryllium in the prime of its production versus the overall workers subject to asbestos fibers.⁵⁸ Although the scientific research on beryllium is still in an early stage, a hypothesis could be made that the number of people exposed to asbestos is more prevalent than numbers of people exposed to beryllium based on the nature of the products and difference in the likelihood of contact that the general public has with each of the two products.

Another difference between beryllium and asbestos is the substances harmfulness in its produced form. Beryllium is not generally hazardous in its processed form, except for an acute reaction.⁵⁹ On the other hand, even after installation, asbestos continues to be a threat to the human lung if the fibers are disrupted and released into the air.⁶⁰ People residing in homes or other structures built between 1930 and 1950 are eligible for exposure to asbestos even today.⁶¹ The use of asbestos has significantly declined and if there is a product made currently containing

51. See *supra* note 17; see also, Rand Institute for Civil Justice, *Asbestos litigation in the U.S.: A New Look at an Old Issue*, available at www.rand.org/publications/DB/DB362.0/DB362.0.pdf (last visited Jan. 23, 2003). The Rand Institute estimates that there are over 500,000 claimants in the United States, each filing suit against multiple defendants.

52. 64 Fed. Reg. 235, *supra* note 1 at 68856.

53. See *supra* notes 14, 72, 136.

54. 29 C.F.R. §1910.1001 (2005).

55. 29 C.F.R. §1926.1101 (2005).

56. 29 C.F.R. §1915.1001 (2005).

57. See *supra* notes 4, 9.

58. See *supra* note 51.

59. See *supra* note 24.

60. The U.S. Environmental Protection Agency's tip sheet for Asbestos Found in the Home, available at www.epa.gov/asbestos/ashome.html (last visited Jan. 23, 2003).

61. *Id.*

asbestos, the product must be properly labeled.⁶² Conversely, at least in Pennsylvania, the production of beryllium has ceased.⁶³

Beryllium, as a toxin, is most similar to asbestos in that the inhalation of beryllium dust has been known to cause latent health effects, up to 40 years after a person's initial exposure to the dust.⁶⁴ Experts have measured the latency period for asbestos illnesses to be as long as 40 years from the time of exposure to fibers.⁶⁵ Due to the long latency periods related to the exposure of both of these toxins, problems arise for plaintiff during litigation related to issues of proximate cause. Asbestos plaintiffs have had difficulties proving that their illness, namely lung cancer and mesothelioma,⁶⁶ was caused by overexposure to a particular asbestos product rather than smoking or another producer's brand of asbestos.⁶⁷ Beryllium plaintiffs on the other hand have difficulty filing their claims within the statute of limitations.⁶⁸ Based on the nature of beryllium disease and the limited number of producers of beryllium, there does not appear to be the same type of causation obstacles for beryllium plaintiffs as there have been for asbestos plaintiffs.

The claims set forth by the beryllium-exposed plaintiffs have similar elements to the claims set forth by plaintiffs exposed to asbestos. Both types of plaintiffs have made claims for medical monitoring as it relates to the latency periods of the toxins.⁶⁹ Another similarity is that close family members of asbestos and beryllium workers were threatened with exposure when subjected to the worker's clothes or shoes.⁷⁰ These

62. *Id.* Even though some products continue to contain asbestos, those products must be properly labeled before they can enter the market.

63. See Beryllium Network: Exposure Risks Industries and Occupations, available at www.chronicberylliumdisease.com/exposure/ex_industries.htm#top (last visited Jan. 23, 2004). This internet source tracks and lists the facilities, locations, and corporations that have produced beryllium.

64. NJMR, *supra* note 18.

65. 49 Fed. Reg. 14116, 14118 (1984) (codified at 29 C.F.R. § 1910). Mesothelioma is a cancer developed by patients in response to asbestos exposure. It has been documented that patients have developed this disease over 40 years after their initial exposure to asbestos. "Lung cancer usually has a latency period in excess of 20 years following the initial exposure to asbestos." See also 48 Fed. Reg. 51009 (2005).

66. STEDMAN'S MEDICAL DICTIONARY 1096 (26th ed. 1995.) Mesothelioma: "a rare neoplasm derived from the lining cells of the pleura and peritoneum which grows as a thick sheet covering the viscera, and is composed of spindle cells or fibrous tissue which may enclose glandlike spaces lined by cuboidal cells."

67. See *supra* note 57.

68. See Holt, 142 A.2d at 511-12; see also *Branco v. Cabot Corp.*, 2002 WL 18333343 (E.D. Pa. 2002).

69. See *Cull v. Cabot Corp.*, 2001 WL 577302 (Pa. Com. Pl. 2001); see also *Wilson v. Brush Wellman, Inc.*, 2002 WL 31320323 (Ohio Ct. App. 2002).

70. See Testimony of Kenneth Rosenman, M.D. Regarding Bills on Compensation of Beryllium-Related Illness Before the Subcommittee on Immigration and Claims of the Committee on the Judiciary, taken 9/21/00, available at www.house.gov/judiciary/rose0921.htm (last visited Jan. 23, 2004.) In his testimony, Dr.

claims most frequently occur with spouses.

B. *Beryllium in Pennsylvania*

Although neither is in operation, there were two plants in Eastern Pennsylvania that have produced beryllium. The Hazelton plant closed in 1978 and the Reading plant closed in 1999.⁷¹ To date, the litigation that has arisen from the Pennsylvania facilities has mainly related to the Reading facility.⁷² Litigation involving the Reading plant has taken two forms: neighborhood exposure and work-related employee exposure cases. This section will give an overview of the cases that have been decided already related to beryllium exposure.

1. Evidentiary Issues

In *Dondore v. NGK Metals Corp.*, the court considered the issue of whether defense counsel could contact potential members of a putative class.⁷³ The putative class included residents of the community that lived near the Reading facility and was described in the second amended complaint.⁷⁴ The court held that the defense counsel could not informally interview potential fact witnesses because the subject matter that the potential plaintiffs would be discussing related to issues overlapping between the state and federal claims.⁷⁵ Therefore, the defendant would not be prevented from obtaining the evidence but would be limited to formal depositions to interview the fact witnesses.⁷⁶

2. Statute of Limitations Issues

In *Branco v. Cabot Corp.*, the plaintiff's father, John C. Branco, died in 1999 of chronic beryllium disease which was believed to be

Rosenman stated that there were three groups of people exposed to beryllium from the Department of Energy and their contractor's plants: the workers, their family members, and the neighboring community.

71. *See supra* note 63.

72. *See supra* note 14; *see also* *Thomas v. Workman's Compensation Appeal Bd.*, 527 A.2d 209 (Pa. Commw. Ct. 1987).

73. *Dondore*, 152 F. Supp. 2d at 663-4.

74. *Id.* at 664.

The putative class members include '[a]ll residents who have ever resided within a six (6) mile radius of the Reading plant for at least six (6) continuous months during the period between 1950 and 1989 inclusive' and '[a]ll residents who have ever resided with a six (6) continuous months during the period between 1980 and 1989 inclusive.'

75. *Id.* at 665. The court stated that "the mere initiation of a class action extends certain protections to potential class members, who have been characterized by the Supreme Court as 'passive beneficiaries of the action brought in their behalf.'"

76. *Id.* at 666.

contracted during the course of his employment and his neighborhood exposure to beryllium emission from the Reading plant.⁷⁷ In 1997, Mr. Branco's physician performed a chest x-ray in response to a letter Branco received from the Department of Health and Human Services warning of the health risks associated with beryllium exposure.⁷⁸ The court held that the plaintiff failed to bring a cause of action within the mandatory two year statute of limitations and, therefore, was barred from all claims.⁷⁹ It is worth noting that the court showed concern with the possibility of opening the floodgates of litigation.⁸⁰

In *Reeser v. Cabot Corp.*, Sharon Reeser filed suit after her mother, Geneva Bare, allegedly died from CBD acquired from inhalation of beryllium dust while living near the Reading plant for over 50 years.⁸¹ The court held that the plaintiff failed to commence the action within Pennsylvania's two-year statute of limitations.⁸² Reviewing the facts in a light most favorable to the plaintiff, the court held that her diagnosis of lung disease in 1997, at the latest, began the statute of limitations, therefore, barred her claim filed in 2001.⁸³

In *Russo v. Cabot Corp.*, the plaintiff also claimed injury from airborne exposure to beryllium in both a neighborhood capacity and as an office employee of the defendant.⁸⁴ However, the court granted the defendant's motion for summary judgment because the statute of limitations had run out for the plaintiff to continue her claim.⁸⁵ The plaintiffs, Branco, Debiec, Reeser, and Russo, filed a motion for reconsideration in May 2002, which also was unsuccessful because the plaintiffs had not proven any change in controlling law, no new factual evidence and presented no new evidence of clear error of law.⁸⁶

77. *Branco v. Cabot Corp.*, 2002 WL 1833343.

78. *Id.* at *1-2.

79. *Id.* at *6; *see also Vitalo v. Cabot Corp.*, 2003 WL 22999240 (E.D. Pa. 2003).

80. *Id.* The court believed any expansion of the discovery rule "would 'open the flood gates to allow anyone with a good faith lack of diligence to claim benefit of the rule' and 'would severely erode the finality of our statute of limitations'" (citing *Cochran v. GAF Corp.*, 666 A.2d 245, 250 (Pa. 1995)).

81. *Reeser v. Cabot Corp.*, 223 F. Supp. 2d at 646.

82. *Id.* at 650.

83. *Id.* at 649.

84. *Russo v. Cabot Corp.*, 2002 WL 1833348 *5 (E.D. Pa. 2002). The court held that the plaintiffs did not establish that they had an inability to know of their injury or its cause despite an exercise of reasonable diligence. *Id.* at *4 (citing *Cochran v. GAF Corp.*, 666 A.2d 245, 250 (Pa. 1995); *Dalrymple v. Brown*, 701 A.2d 164, 170 (Pa. 1997); *Pocono Int'l Raceway, Inc. v. Pocono Produce, Inc.*, 468 A.2d 468, 471 (Pa. 1983)).

85. *Russo v. Cabot Corp.*, 2002 WL 1833348 *4 (E.D. Pa. 2002). The statute of limitations began to run for the plaintiff on April 12, 1999. Her claim was filed in May of 2001. *Id.* at *1.

86. *Id.* at *4-5. The same group of plaintiffs Russo, Debiec, Branco and Reeser, were also cited in a case involving a discovery issue. *See Vitalo v. Cabot Corp.*, 212

Yet, the Third Circuit recently ruled that the plaintiffs, Debiec, Reeser, and Russo had made a reasonably diligent effort to learn of the cause of their illnesses.⁸⁷ The court however, did not extend this ruling to the plaintiffs in *Branco*.⁸⁸ The court's rationale was that Debiec, Reeser, and Russo were all told by their physicians that it was *unlikely* that they were suffering from chronic beryllium disease.⁸⁹ The court stated that "a plaintiff cannot be charged with having more information than his doctors have about his condition."⁹⁰

The court stated that an "unrebutted suspicion that a claimant has a particular disease, which is caused by another, is sufficient to start the clock."⁹¹ The court believed that had the plaintiffs know their diagnosis was chronic beryllium disease, they would have known the cause was the beryllium plant.⁹² Until then, there was little reason to suspect the beryllium plant caused their injuries.⁹³ The Third Circuit Court of Appeals reversed the District Court's ruling as to the plaintiffs Debiec, Reeser, and Russo holding that a jury should decide whether the plaintiffs employed reasonable diligence as to finding the cause of their injury.⁹⁴

3. Diversity Issues

Plaintiffs have also tried to destroy diversity to keep the litigation in the more plaintiff-friendly jurisdiction of Philadelphia County. In *Guldner v. Brush Wellman, Inc., et al.*, the plaintiffs sued the defendant for fraudulent misrepresentation.⁹⁵ The court held that the joinder of a co-worker of the plaintiff was permissible and not done solely to breach diversity.⁹⁶

F.R.D. 472, 473 (E.D. Pa. 2002). In *Vitalo*, the court reviewed whether the plaintiffs' counsel had to produce to the defense counselors the air modeling information that their experts used in developing their opinions. The court held that the materials were discoverable. *Id.* at 474.

87. See *Debiec v. Cabot Corp.*, 352 F.3d 117, 121 (3d Cir. 2003).

88. *Id.*

89. *Id.* at 130.

90. *Id.* (citing *Trieschock v. Owens Corning*, 511 A.2d 863 (Pa. Super. Ct. 1986.)).

91. *Debiec v. Cabot Corp.*, 352 F.3d at 132. "[T]he plaintiffs in the cases at bar developed illnesses over a long period of time and did not know from the outset that their condition was an injury caused by another." *Id.* at n. 5.

92. *Id.* at n. 6.

93. *Id.*

94. *Id.* at 140.

95. *Guldner v. Brush Wellman, Inc.*, 2001 WL 856699 *1 (E.D. Pa. 2001). A plaintiff may hold a co-employee liable for his injuries resulting from intentional acts under the Workman's Compensation Act. 77 P.S. §72 (2005).

96. *Guldner v. Brush Wellman, Inc.*, 2001 WL 856699 *4 (E.D. Pa. 2001). The court allowed the plaintiffs to amend their complaint. The case was remanded to Court of Common Pleas in Philadelphia. See also *Pohl v. NGK Metals Corp.*, 117 F. Supp. 2d

4. Medical Monitoring Issues

Medical monitoring has been presented as an issue of contention between beryllium producers and plaintiffs who fear that they will later develop chronic beryllium disease. In *Cull v. Cabot Corp.*, the court noted the elements a plaintiff must prove in a medical monitoring case.⁹⁷ The court did not permit a cause of action for strict liability medical monitoring.⁹⁸ However, the court also held that the plaintiffs could continue on a negligence-based cause of action for medical monitoring.⁹⁹

Each of the cases mentioned has yet to be decided definitively. There is much contention left as to whether the beryllium vendors will be liable to neighbors of the Reading plant and whether there will be any weight given to the notion of there being a civil conspiracy between the AEC and the producers of beryllium in an effort to keep the exposure standard higher.

C. Beryllium Litigation in Other States

Ohio and Tennessee are two other states with large beryllium production facilities and notable pockets of beryllium case law.

1. Tennessee

The leading case for beryllium exposure, *Morgan v. Brush Wellman, Inc.*,¹⁰⁰ was decided by the Eastern District of Tennessee. In this class action lawsuit, the court held that supplier of beryllium was entitled to use the government contractor and sophisticated user defenses under Tennessee law in regards to the product liability claims.¹⁰¹

The government contractor defense is a claim that arose as a result of government contracts, during World War II, between the United States

474 (E.D. Pa. 2000). The court remanded the beryllium class action because the individual plaintiffs did not make the \$75,000 threshold for their damages.

97. *Cull v. Cabot Corp.*, 2001 WL 577302 *2 (Pa. Com. Pl. 2001) (citing *Redland Soccer Club, Inc. v. Dep't of the Army*, 696 A.2d 137 (Pa. Super. Ct. 1997)). The elements of a medical monitoring cause of action are:

(1) exposure greater than normal background levels; (2) to a proven hazardous substance; (3) caused by the defendant's negligence; (4) as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting serious latent disease; (5) a monitoring procedure exists that makes the early detection of the disease possible; (6) the prescribed monitoring regime is different from that normally recommended in the absence of the exposure; and (7) the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles.

98. *Cull v. Cabot Corp.*, 2001 WL 577302 *3 (Pa. Com. Pl. 2001).

99. *Id.* at *4.

100. *Morgan*, 165 F. Supp. 2d at 704.

101. *Id.* at 718.

and several metals producers to develop parts for nuclear weapons.¹⁰² As a result those companies were bound to follow the instructions and specifications set forth by the government in an effort to meet production requirements.¹⁰³ Since there is sovereign immunity on behalf of the government, the company acting on its behalf is immune from liability too.¹⁰⁴

The court relied on a three part test for the government contractor defense which was established in *Boyle v. United Technologies Corp.*¹⁰⁵ This test states that a defective design claim is precluded when a product was supplied to the United States government if: “(1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the manufacturer warned the United States about the dangers in the use of the equipment known to the manufacturer, but not the United States.”¹⁰⁶

In *Morgan*, the court reasoned that the risks of beryllium were known as early as 1951 when Mr. Eisenbud, a scientist employed by the AEC, studied the effects of beryllium and established a tentative standard of 2.0 $\mu\text{g}/\text{m}^3$.¹⁰⁷ The court held that government contractor defense allowed suppliers of beryllium to be covered under the umbrella of protection from liability because the contractors had warned the government about the known risks and there was no duty to warn the United States government of things that were already known by the AEC.¹⁰⁸ This defense is used often for its obvious benefits to producers of inherently dangerous products who have contracts with the government to produce their general products.

The second defense in this case was sophisticated user, which also proved successful for the defendants in *Morgan*.¹⁰⁹ The sophisticated user defense relieves a manufacturer of its duty to warn if the goods are sold to a sophisticated user.¹¹⁰ The court stated that “the United States is arguably the world’s most sophisticated user of special nuclear materials, including beryllium.”¹¹¹ Therefore, the court held that there was no duty

102. *Id.* at 710. “Use of beryllium by the United States War Department began during the Second World War under the Manhattan Project.”

103. *Id.*

104. *Id.*

105. *Boyle v. United Technologies Corp.*, 487 U.S. 500, 512 (1988).

106. *Id.*

107. *Morgan*, 165 F. Supp. 2d at 717. The court noted that the AEC felt that there was an acceptable risk for exposure at 2.0 $\mu\text{g}/\text{m}^3$ level. There is deference given to an agency in deciding exposure levels and even though the exposure level is not zero, there will not be government liability for injury.

108. *Id.*

109. *Id.* at 718.

110. *Id.*

111. *Morgan*, 165 F. Supp. 2d at 718.

for the United States, and consequently the defendant beryllium vendors, to warn their workers of threat of beryllium because the defendant was knowledgeable of the danger.¹¹² "The acts or omissions of these government agencies would constitute an intervening cause that would immunize the manufacturers or vendors from liability."¹¹³

Another interesting claim that the *Morgan* plaintiffs proffered in their complaint was one of civil conspiracy.¹¹⁴ The plaintiffs maintained that there was a two-part conspiracy.¹¹⁵ First, the defendants withheld from the public vital safety information regarding the health risks of beryllium and second, that the defendants withheld information known to the defendants from the government regarding the danger associated with beryllium exposure.¹¹⁶ The *Morgan* court noted that the elements of civil conspiracy as per Tennessee law are: "(1) a common design between two or more persons; (2) to accomplish by concerted action an unlawful purpose, or a lawful purpose by unlawful means; (3) an overt act in furtherance of the conspiracy; and (4) resulting injury."¹¹⁷ The court ruled that the plaintiffs failed to establish a proximate cause of their injuries, thereby precluding all other claims for recovery.¹¹⁸

The case preceding *Morgan* in the Eastern District of Tennessee was *Byrd v. Brush Wellman, Inc.*¹¹⁹ This case established that the defendant was not liable to a employee of a customer that Brush Wellman sold beryllium oxide to because a proximate cause was not established by the plaintiff.¹²⁰ The court's rationale for the holding was derived from *Goodbar v. Whitehead Bros.*,¹²¹ in which the court created three possibilities that would release the manufacturer from liability:

- (1) A supplier can discharge its duty to warn the ultimate user of the dangers associated with its product by adequately warning the employer, who can reasonably be expected to pass the information onto its employees.
- (2) The employer's own action of not adequately

112. *Id.*

113. *Morgan*, 165 F. Supp. 2d at 719. Because there is *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984), deference given to an agency when making policy decisions as to choosing design specifications for a product, the DOE standard of 2.0 $\mu\text{g}/\text{m}^3$ was considered appropriate by the court in light of the policy considerations the AEC contemplated when adopting the standard. *Id.* at 722.

114. *Morgan*, 165 F. Supp. 2d at 719.

115. *Id.*

116. *Id.*

117. *Id.* at 720.

118. *Id.* at 721. "There is no evidence that they [defendants] did anything other than attempt to keep OSHA from imposing on beryllium manufacturers stricter guidelines which would increase their production costs." *Id.*

119. *Byrd v. Brush Wellman, Inc.*, 753 F. Supp. 1403 (E.D. Tenn. 1990).

120. *Id.*

121. *Goodbar v. Whitehead Bros.*, 591 F. Supp. 552, 566-7 (W.D. Va. 1984), *aff'd* *Beale v. Hardy*, 769 F.2d 213 (4th Cir. 1985).

informing its employees of the hazards of the product may be the sole proximate cause of the injury. (3) The employer may not only be knowledgeable of the product's dangers and safe use, but may also be the only party with reasonable access to its employees, such that the supplier owes no duty to warn those employees.¹²²

The court held that there was adequate warning by Brush Wellman to the plaintiff's employer, Minnesota Mining and Manufacturing Company (better known as "3M") so as to release their liability to the plaintiff.¹²³

2. Ohio

In Ohio, the treatment of the beryllium litigation is similar to Pennsylvania's approach to beryllium litigation in the sense that there is a primary focus on whether the plaintiffs have submitted their claim in a timely fashion. In *Norgard v. Brush Wellman, Inc.*, the court held that the plaintiffs' claims were not time barred by Ohio's statute of limitations for personal injury claims.¹²⁴ David Norgard was a Brush Wellman employee in 1981 at the Elmore, Ohio plant.¹²⁵ Shortly, after the beginning of his employment, the plaintiff developed a rash which proliferated into skin ulcers.¹²⁶ Norgard's reaction to beryllium raised a red flag for Brush Wellman that he would be sensitive to beryllium and filed a workman's compensation claim on his behalf.¹²⁷

The court held that a cause of action is properly filed for an intentional tort if filed in a timely manner after the employee discovers or should have discovered the injury and the wrongful conduct of the employer.¹²⁸ The court reversed the motion for summary judgment for Brush Wellman and ordered the case to be remanded to the trial level.¹²⁹ What is notable about this case is that there is similar language regarding the discovery rule exception for use in tolling the statute of limitations, as seen in Pennsylvania in the *Reeser* opinion.¹³⁰

Another case involving beryllium in Ohio was *Renwand v. Brush*

122. *Byrd*, 753 F. Supp. at 1405 (E.D. Tenn. 1990). The court noted that the National Counsel of Safety had believed that Brush Wellman's label was exemplary in regards to what manufacturer's labels should be if the product contained beryllium. *Id.* at 1408.

123. *Id.* at 1414.

124. *Norgard v. Brush Wellman, Inc.*, 766 N.E.2d 977 (Ohio 2002).

125. *Id.* at 978.

126. *Id.*

127. *Id.*

128. *Id.*

129. *Norgard v. Brush Wellman, Inc.*, 766 N.E.2d at 981. The dissent believed that the plaintiff knew of his injury and the proximate cause of the injury in 1992. *Id.* at 982.

130. *Id.* at 979. See also *Reeser v. Cabot Corp.*, 223 F. Supp. 2d 644, 647-8 (E.D. Pa. 2002).

Wellman, Inc., where an employee claimed that his employer intentionally exposed him to high levels of beryllium.¹³¹ The court disagreed and held that the defendant did not have “substantial certainty” that the plaintiff would become ill from his exposure to beryllium.¹³² The court stated that the defendant was substantially certain, more than having mere knowledge or appreciation, of the risk associated with beryllium production but that Brush Wellman, Inc. had provided the plaintiff with sufficient health information and safety procedures in an effort to minimally expose their employees to beryllium.¹³³

Finally, in *Jones v. Brush Wellman, Inc.*, the case was litigated in Ohio but the court applied the law of Tennessee.¹³⁴ The court granted the defendant’s motion to dismiss holding that there was no cause of action for medical monitoring in the absence of a present injury.¹³⁵ Both Ohio and Tennessee show timidity of being too sympathetic to plaintiffs. Each of the decisions hold the plaintiff to a high standard of proof in regards to the proximate cause of their injury.

IV. Conclusion

The second round of beryllium cases are still in their infancy in the Philadelphia County court system.¹³⁶ Plaintiffs’ counsel undoubtedly

131. *Renwand v. Brush Wellman*, 778 N.E.2d 654, 656 (Ohio Ct. App. 2002).

132. *Id.* at 660. The elements of an intentional tort committed by an employer against an employee are

- (1) knowledge by the employer of the existence of a dangerous process, procedure, instrumentality or condition within the business operation;
- (2) knowledge by the employer that if the employee is subjected by his employment to such dangerous process, procedure, instrumentality or condition, then harm to the employee will be a substantial certainty; and
- (3) that the employer, under such circumstances, and with such knowledge, did act to require the employee continue to perform dangerous task.

Id. at 657.

133. *Id.* at 659.

134. *Jones v. Brush Wellman, Inc.*, 2000 WL 33727733 *3-4 (N.D. Ohio 2000). “The majority of courts hold that a failure to warn occurs at the place where the plaintiffs could reasonably have been warned regardless of where the decision not to warn took place.”

135. *Id.* at *8.

Under Tennessee law, to recover for future effects of an injury, the future effects must be shown to be reasonably certain and not a mere likelihood or possibility and . . . before a plaintiff may recover for potential injuries, there must be a reasonable degree of medical certainty that the plaintiff will develop a disease in the future as a result of an injury.

Id. at *7.

136. *See Philadelphia County Docket, supra* note 53. *Anastasio v. NGK North America, Inc.*, No. 031000116 (Philadelphia County Oct. 6, 2003); *Anderson v. NGK North America, Inc.*, No. 031000158 (Philadelphia County Oct. 6, 2003); *Bailey v. NGK North America, Inc.*, No. 031000122 (Philadelphia County Oct. 6, 2003); *Baum v. NGK Metals Corp.*, No. 000901760 (Philadelphia County Sept. 15, 2000); *Berg v. NGK North America, Inc.*, No. 031000115 (Philadelphia County Oct. 6, 2003); *Bochis v. NGK North*

will have learned from the previous cases to prepare a more successful offensive that will prevent the court from granting straight forward motions for dismissal on the basis of the statute of limitations. On the other hand, defense counselors will more than likely try to use the defenses that were successful in Tennessee, such as the government contractor defense and the sophisticated user defense. The courts are taking these cases slowly by deciding preliminary issues gradually in an effort to prevent the floodgates of litigation from being opened in Pennsylvania.

The courts may see this as a patient nudge to push former employees of the popular defendants, Cabot Corporation, Brush Wellman Inc., and NGK Metals Corporation to file grievances under the Pennsylvania Occupational Disease Act or in accordance with the U.S. Energy Employees Occupational Illness Compensation Program. Although the fund is a far less time consuming process than litigation, it is a one-time only compensation program and, in some cases, the plaintiffs may feel that their non-economic damages from their injuries exceed the allotted compensation amount. There are other problems with this method of compensation. For instance, the compensations programs are limited to employees of the Department of Energy or the beryllium vendors and the deadlines have expired at this point for injured parties to file claims under the federal compensation program. Therefore, an employee's remedies would be limited to tort litigation or the Pennsylvania Occupational Disease Act at this point.

Given the establishment of a federal compensation program, the courts will be deciding less lawsuits. Yet, there still exists room for many complaints to be filed because the compensation funds do not extend to residents who live near the facilities. Barring any new scientific evidence regarding beryllium emissions and the distance it can travel, there stands to be thousands of neighbors of the Reading plant

America, Inc., No. 031000108 (Philadelphia County Oct. 6, 2003); Downey v. North America, Inc., No. 031000109 (Philadelphia County Oct. 6, 2003); Graeff v. NGK North America, Inc., No. 031000105 (Philadelphia County Oct. 6, 2003); Guldner v. Brush Wellman, Inc., No. 001200659 (Philadelphia County Dec. 6, 2000); Harris v. NGK Metals Corp., No. 030104388 (Philadelphia County Jan. 31, 2003); Hoffman v. NGK North America, Inc., No. 031101983 (Philadelphia County Nov. 17, 2003); Hoffmaster v. NGK North America, Inc., No. 03100318 (Philadelphia County Oct. 17, 2003); Kuscan v. NGK Metals, Corp., No. 010801135 (Philadelphia County Aug. 14, 2001); Moatz v. North America, Inc., No. 030600415 (Philadelphia County June 4, 2003); Pohl v. NGK Metals Corp., No. 000700733 (Philadelphia County July 7, 2000); Reeser v. NGK Metals Corp., No. 021004321 (Philadelphia County Nov. 1, 2002); Rogers v. NGK North America, Inc., No. 0311011981 (Philadelphia County Nov. 17, 2003); Schlott v. NGK Metals Corp., No. 030501247 (Philadelphia County May 12, 2003); Strausser v. NGK North America, Inc., No. 031000113 (Philadelphia County Oct. 6, 2003); Young v. NGK North America, Inc., No. 031000111 (Philadelphia County Oct. 6, 2003).

who could file suit.

Unlike asbestos, there is no feasible substitute for beryllium.¹³⁷ The courts are lucky in the sense that there were many less overall exposures to beryllium than asbestos. There is little doubt that the sheer numbers of people exposed to asbestos is much greater than those exposed to beryllium. Since the DOE thwarted the litigation by establishing a no-fault recovery system, they have reduced the probability of litigation from employees. The courts are also helped by the establishment of the state no-fault compensation fund. However, there could be interesting litigation which develops as to the civil conspiracy theory and the neighborhood exposure to beryllium emissions. Regardless, beryllium exposure is not going to be nearly as lucrative for plaintiffs' attorneys as asbestos has proven to be. Nevertheless it will change the features on the face of toxic tort litigation in Pennsylvania.

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137. *See Morgan*, 165 F. Supp. 2d at 709. "There is no current substitute for beryllium's application in the nuclear weapons industry."

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