News Magazine Articles

Asbestos: A Never-Ending Epidemic

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Landfill diversion is becoming a must. If we continue to landfill asbestos-containing materials, consequently, we are burdening the future generation to deal with unpredictable cleanup costs and an infinite amount of asbestos-related deaths.

By Tony Nocito

Yearly, landfills that store asbestos-containing materials are quickly attenuating. The never-ending asbestos deadly diseases: lung cancer, asbestosis, and **Mesothelioma** will continue along with perpetual litigation. How are we going to manage the abundance of asbestos-containing material that permeates the world's built environment? Let's examine the asbestos industry past and present and the possible solutions.

Brief History of Asbestos

Asbestos was first known to be used in 2400 BC for pots and eating utensils. Two thousand years ago, the Greeks and Romans used asbestos for tablecloths, napkins, clothing, head covering for women, nets and building materials. At that time, Scholar Pliny the Elder recommended not to buy the slaves that worked in the asbestos quarries because they died young from lung ailments. Asbestos were mined in Wards Hill quarry, Staten Island, NY, from 1858 to late 1900 and the Jeffery mine, Quebec, Canada, from 1870 to 2012 by the Johns-Manville Company, In west-central California the King City asbestos mine, owned by Union Carbide mined asbestos from 1962 to 2002. It was the last active asbestos mine in the U.S. According to U.S. Geological Survey, Russia, the largest producer, China, second-largest producer, Kazakhstan, and India are still mining asbestos. The U.S. imported 100 tons of asbestos in 2019. Why?

Libby, MT: The Worst Environmental Disaster in U.S. History

In 1919, Vermiculite was discovered in the mountains of Libby, MT, by E.N.Alley, who started the Zonolite Company. The Zonolite Company fueled the largest employment boom Libby had ever seen. The Vermiculite is tainted with Tremolite asbestos—one of the most toxic asbestos' in the Amphibole family. Little did the employees know about the asbestos in the Vermiculite. In 1963, W.R. Grace (Grace) bought the Zonolite Company, which had an 80 percent share of the worldwide Vermiculite market.

The Vermiculite mine operated until 1990 when it shut down. By this time, Grace had poisoned many of Libby citizens and contaminated the

currently suffering illnesses related to asbestos exposure, lung cancer, asbestosis and Mesothelioma. To further exacerbate the asbestos-contamination, the Libby mine produced millions of tons of Vermiculite used in millions of homes and buildings as insulation, in animal feed, in certain types of nutrients, including vitamin preparations, fat concentrations, molasses, gardening, soils, agriculture products, packing material, automotive brakes, clutches and mufflers, and a multitude of construction materials.

On February 7, 2005, Grace was indicted along with seven current and former Grace executives "for knowingly endangering residents of Libby, Montana, and concealing information about the health effects of its asbestos mining operations. It was the purpose of the conspiracy to conceal and misrepresent the hazardous nature of the Tremolite asbestos-contaminated Vermiculite, thereby enriching defendants and others," the indictment read. It also said Grace tried to "defraud the United States and others by impairing, impeding, and frustrating" the Environmental Protection Agency and other government agencies once they launched an investigation in 1999. The co-conspirators of the asbestos company's coverup were company executives, lawyers, employees, doctors and insurance companies,

W.R. Grace Makes an Effort to Take Asbestos Out of Our Built Environment

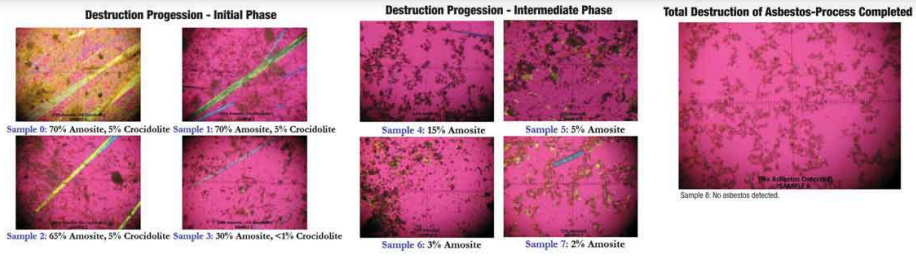
Grace also sold spray-on fireproofing material (trade name: Monokote). Monokote contained Tremolite and Chrysotile asbestos and was used for fireproofing millions of steel-structured buildings. The World Trade Center and Madison Square Garden were such buildings, as well as

buildings with hazardous Monokote. By 1993, Grace spent millions of dollars to have the Monokote abated from a small portion of these buildings. Grace knew how much Monokote they sold and knew that something must be done to ease the expensive burden of having to abate the multitude of buildings fireproofed with Monokote. The forced abatement prompted Grace to seek out ways to mitigate the removal of the Monokote by destroying the asbestos in the Monokote while the Monokote was still in-situ.

Consequently, Grace contracted Brookhaven Laboratory to develop an in-situ asbestos destruction process. After approximately four years of research and development and millions of dollars, Brookhaven Laboratory successfully developed an in-situ asbestos destruction process for spray-on fireproofing. Unfortunately, the in-situ process did not qualify for commercial use by the Federal Environmental Protection Agency's National Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 61.155: Standard for operations that convert asbestos-containing waste material into non-asbestos (asbestos-free) material. Grace was the only asbestos company that made an effort to remove asbestos from our built environment.

Legal Windfall at the Cost of Death

There is no safe level of asbestos exposure, and the asbestos fibers are so light that they can float in the air for up to 72 hours if the air is stable, longer if the air is somewhat turbulent. The asbestos fibers are so minuscule the naked eye cannot see them. We have all seen the many daily commercials by law firms that tout; "If you or a loved one has been diagnosed with Mesothelioma, a rare form of lung cancer



Through Process Asbestos Destruction Samples Taken in 15 min intervals. Microscopy and Photos Done at the ABVOV® Pilot Plant by Chaiyut Sae Lao, EMS Analytical, Inc., 2012 during a demonstration for the Federal EPA. Images courtesy of ABCOV®."

Cost of Asbestos Contamination: Who Pays?

The companies that profited from mining, manufacturing and selling asbestos-containing products filed for Chapter 11 Bankruptcy protection.If a company was insolvent, Chapter 7 complete liquidation, was filed. The companies that filed Chapter 11 contributed to a 30 billion dollar trust fund set up to pay compensation to asbestos victims. The trust protects the asbestos firms from any further financial and legal obligation to the victims who are suffering from asbestos-related diseases. The victims have medical expenses. The courts have legal costs that are paid by the taxpayer. The people who are sickened by asbestos exposure receive compensation from trust funds between 10 to 30 percent of the amount applied for through their attorneys who charge a fee for representing them. The problem with the trust fund payments is the fund is only obligated to pay out the company's share of the trust—as the fund pays claimants, the fund's capital depletes. Therefore, the fund seeks to reduce the percentage of the payout. Eventually, due to never-ending inevitable ongoing claimants and the fact that asbestos diseases have a latent period of 20 to 50 years, the fund will run out of money. There are billions of tons of asbestos and asbestos-containing materials in our built environment, exposing and sickening millions of people throughout the world. Asbestos contamination will be with us long after the trusts have depleted and the taxpayer, ultimately, ends up footing the bill. The aforementioned does not address the most substantial cost—the prolonged pain and the suffering of the individual who is sick with an

Asbestos Contamination Around the World

Asbestos is in schools, offices, commercial buildings, homes, utilities, power generating stations, federal buildings, military bases, ships, railroad cars, refineries, public service entities, buses and trains, brownfields, asbestos-containing cement water pipes, electrical wiring, acetylene tanks, turbo-generating stations, brakes, clutches, mufflers, floor tiles, hairdryers, roofing, siding, soil, talcum powder, makeup, etc. Asbestos was so widely used that the list of asbestos-containing materials could go on and on.

The U.S. has only abated 20 to 25 percent of asbestos in its built environment. For example, after 35 years of required asbestos abatement in schools, the Philadelphia, PA school district has just started to abate the asbestos. Canada has abated only 10 percent of its asbestos; an example of this would be the 800 million tons of asbestos tailings that are in the town of Asbestos, QC. Yes, you read it right Asbestos is the name of the town, but because of the stigma connected with the name, the town is working to change the name.

The Caribbean islands have no space to store their asbestos-containing materials. The beautiful island of Bermuda by its own admission has more asbestos per square mile than any place on earth. Part of which is hundreds of rotten containers filled with asbestos from the World War II U.S. Naval Air Station. The middle east, because of the oil refineries. Bahrain has no asbestos landfill. Africa, Nairobi, lacks asbestos landfills, and the oil companies in Nigeria have stored asbestos in containers with no asbestos landfills. Australia, the western town of Whitonoon, is similar in asbestos contamination as

America. Western Europe is becoming hard-pressed for landfill space; Eastern Europe has not made a dent in the asbestos-containing materials in its built environment. China, Korea and Japan are laden with asbestos-containing materials. Japan has no asbestos landfill space, and Korea has limited asbestos landfill space,

Lack of Money Threatens Human Life

Asbestos was a very prolific and profitable business for 150 years. The asbestos miners and manufacturers have left us with a legacy of cleanup projects that will take an innumerable amount of years with incalculable costs, and there is not enough landfill space in the world to store the asbestos-containing materials that will have to be abated from our built environment.

Landfill diversion is becoming a must. If we continue to landfill asbestos-containing materials, consequently, we are burdening the future generation to deal with unpredictable cleanup costs and an infinite amount of asbestos-related deaths. For now, landfilling is the cheapest and easiest way to dispose of asbestos-containing materials. There are commercially available asbestos destruction technologies on the market, both thermal and non-thermal. Like any other waste treatment technologies, the initial costs of using asbestos destruction technologies may be higher than landfilling. There is no question that in the long run, the use of these technologies will be less costly in every way. To save one life is to save the world. | WA

Asbestos: A Timeline

1918: The U.S. Bureau of Labor Statistics releases a report that reveals abnormally high risk of early death among asbestos workers.

1929: Johns-Manville employees began claiming disability from lung diseases.

1933: Met Life Insurance found 29 percent of the Johns-Manville factory workers had asbestosis.

1934: Researchers find cases of asbestosis and lung cancer, not only in factory workers who had asbestos exposure, but also in workers who installed asbestos products such as boiler workers and insulators.

1943: The first cases of the deadly Mesothelioma were reported.

1949: The link between asbestos and occupational cancer published in The Journal of the American Medical Association.

1960: The definite link between asbestos exposure and the diseases lung cancer, asbestosis and Mesothelioma confirmed. Asbestos manufacturers hid or altered these findings.

1978: The supreme court rules an asbestos coverup by the asbestos-product manufacturers who made a "conscious effort" to suppress and hide the dangers of working with asbestos.

1989: The Environmental Protection Agency (EPA) phases out and bans the use of asbestos in almost all products.

1991: Asbestos industry lobbyists successfully overturn the ban.

1993: Griffiss Air Force Base, Rome, NY licenses, installs, and operates the first commercially, non-thermal, EPA approved ABCOV® Method of asbestos conversion to a non-asbestos recyclable material.

1997: Aberdeen Proving Grounds, MD licenses, installs, and operates the second commercially, non-thermal, EPA approved ABCOV® Method of asbestos conversion to a non-asbestos recyclable material.

2009: Report (#109-452), House of Representatives for the bill H.R. 5122 Non-thermal Treatment of Asbestos and Asbestos Containing Material. The committee is concerned about the long-term effects of the disposal of asbestos and asbestos containing material (ACM). The committee recognizes the benefits of transforming asbestos and ACM into a non-hazardous material and notes the problems associated with thermal treatment of hazardous waste. The committee is aware that

Department to continue its exploration of non-thermal asbestos technology and to consider its use when treating asbestos or ACM at DOD installations.

2004-2020: Linda Reinstein is the CEO/President of the non-profit Asbestos Disease Awareness Organization (ADAO). Linda lost her husband, Alan, to Mesothelioma in 2003. Linda has arduously and consistently raised money and lobbied congress for the last 16 years to pass legislation: Alan Reinstein Ban Asbestos Now Act. Linda's goal is to start to mitigate the 40,000 deaths that occur each year from asbestos related diseases.

Tony Nocito is Managing Member of ABCOV Companies, LLC (New York, NY) and other related companies that provide commercially available services for the non-thermal, EPA approved ABCOV® Method of asbestos destruction and conversion to a non-toxic material and the non-thermal process that converts Hexavalent Chromium in soil to the nontoxic Trivalent Chromium in soil and the non-thermal process that reduces overburden and off-specification fiberglass blow, batt and other manufactured fiberglass insulation to 10 percent of their original volume. He markets and provides these services through his companies. Tony can be reached at (212) 571-9125, cell: (917) 270-7781, e-mail tony@abcov.com or visit www.abcov.com.

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Asbestos.Com

What is Asbestos? The History and Danger Behind Asbestos, Google Wards Hill quarry, Staten Island, NY The Minerals of New York, Jeffrey Mine, Johns-Manville, in the Town of Asbestos, Quebec, Canada. King City asbestos mine. Google.

Mine production of asbestos – leading countries 2010-2019. Google.

How much asbestos is imported into the U.S. 2019. Google.Libby, MT, is the site of one of America's worst man-made environmental disasters. Toxic asbestos dust from the vermiculite mines that helped the town prosper for decades has killed hundreds of residents, sickening thousands more. Victims continue to surface. Google.

LibbyMT.com

Fatal Deception The Terrifying True Story of How Asbestos Is Killing America, Author Michael Bowker Publisher Simon and Schuster Revised Edition 2003.

Asbestos.Com Libby MT. Google.

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W.R. Grace and Brookhaven National Laboratory Collaborate on a Chemical Method to Treat Asbestos. Dr. Leon Petrakis, December 10, 1997, Google. Asbestos Bankruptcy Trusts. Google.

Bermuda's Environment Pollution: Search asbestos on this page. Google.

Asbestos Bermuda ABCOV® Presentation 4/20/2015. On April 17, 2015. Experts Meeting on Environmentally Sound Technologies for Waste Management in Caribbean SIDSABCOV® has been and is contacted by companies around the world mentioned in the article. ABCOV® licensed a company from Australia and a Shell Oil Contractor from Nigeria. Both, unfortunately, defaulted on payment and could not give ABCOV® security after the defaults. Mesotheliomahelp.org

Asbestos Timeline: ABCOV® experience; Emails and discussions with Linda Reinstein, Asbestos Disease Awareness Organization.

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consistently raised money and lobbied congress for the last 16 years to pass legislation: Alan Reinstein Ban Asbestos Now Act. Linda's goal is to start to mitigate the 40,000 deaths that occur each year from asbestos related diseases.

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