BY DR. DONALD ALLEN DEEVER

A BULLET DODGED

A catastrophic health hazard was ignored at the Crescent Peak Wind project site

HIGH COSTS TO TAXPAYERS AND damage to ecosystems are associated with industrial scale solar and wind energy but few public officials recognize the health hazards that exist when potentially dangerous soils are disturbed in geological hot spots such as those near the border of southern Nevada and California.

Public health emergencies are declared by the Environmental Protection Agency (EPA), yet only once has a human-made disaster caused a state of emergency to be declared. Most might guess that occurred at Three-Mile Island or Love Canal; no, it was at Libby, Montana. Although a small town, Libby represented a disaster of epic proportions, yet the consequences at Libby may have paled in comparison to a situation that was only recently averted just outside the highly-populated Las Vegas valley area.

What the Montana disaster and Nevada have in common are large deposits of a naturally occurring fibrous amphibole mineral, a highly dangerous form of asbestos, and one that easily goes airborne to be inhaled by victims. The Libby disaster came from a vermiculite mine that spread enough asbestos fibers throughout the town of nearly 2,800 people to cause more than 400 deaths before a proper clean-up could be completed. To date, more than 2,400 people from Libby have been diagnosed with mesothelioma or related asbestos exposure diseases. The emergency resulted in a mortality rate of 14 percent and produced serious illness among 87 percent of the residents. At that rate, with an estimated population in Clark County of 2.2 million, a similar Libby-type disaster might conceivably decimate 308,000 Nevadans and sicken over 1.9 million people, not including tourists. If only 5 percent of that potential were realized, the devastation would make worldwide headlines.

There are places on the planet whose native desert soils should not be disturbed, either due to their scenic qualities, historical/cultural importance, recreational value, diversity of wildlife, or due to what might be inadvertently unleashed beneath its ground cover. In the case of southern Nevada, along a particularly pristine 22-mile swath of the McCullough Range, all the above listed attributes come together. Until late November, a major disturbance of the state's largest Joshua tree forest there had been planned by the Crescent Peak Wind project, a Sweden-based wind energy development company, who intended to initiate a massive earth-moving operation in order to erect up to 248 industrial wind turbines of a size that are common offshore but are seldom constructed on land.

The site of the Crescent Peak Wind project site was, quite obviously, selected due to sufficient available wind. As the wind directions at the site vary widely with the seasons, they would certainly disperse the asbestos fibers over an extraordinarily large area that would include the Las Vegas metropolitan area and portions of California's San Bernardino County. If the Bureau of Land Management (BLM) had allowed the

Libby Montana. Photo by USEPA Environmental-Protection-Agency

Crescent Peak Wind project to proceed as requested, over 32,000 acres of pristine soils would have been disturbed by a network of over ninety miles of new dirt roads thirty-six feet wide. In addition, the plans of Eolus Vind (parent company of the project) called for the widening of fifteen miles of existing dirt roads. Other land disturbance would have been created by the construction of substations, operation and maintenance centers, transmission lines, collector systems, and tower foundations. A minimum of three to five acres are generally cleared for each modestly-sized tower that is set in a foundation typically fifty feet wide by thirty feet deep.

As there is ample published evidence that the project area is known for metamorphic rock containing high concentrations of dangerous long-fiber asbestos, few wind energy development sites on desert soils could have been more poorly chosen. The only other known location of similar asbestos fibers are found in Libby, Montana. This health risk was first made known in the *Soil Science Society of America* journal in 2013, an article written by Dr. Brenda Buck and contributing members of the Department of Geoscience at the University of Nevada, Las Vegas (UNLV).

One year prior to that publication, Dr. Francine Baumann, a cancer epidemiologist specializing in mesothelioma, planned to present her findings of the asbestos threat in Clark County, at the Geological Society of America (GSA) meeting in Charlotte, N.C. This presentation was to be given along with Dr. Brenda Beck. When word of their proposed lecture reached the Nevada State Health Department (NSHD), Nevada's chief medical officer, Tracey D. Green, wrote a letter to them on October 30, 2012, disputing the team's findings and threatening legal action if they did not cease-and-desist with their scheduled talk. Perplexed but fearing a lawsuit, they canceled their presentation, whereupon Dr. Baumann dropped any further investigations into the study. Going beyond legal threats, Green prevented the researchers from gaining further access to Nevada's cancer registry data, which may have provided the evidence needed to link the finding of asbestos to mesothelioma cases in southern Nevada.

Although the NSHD (now known as the Nevada Division of Public and Behavioral Health) prevented the researchers from disseminating their data, their findings were eventually published in 2013: *"Because large populations in Boulder City, Henderson, and Las Vegas are located only a few kilometers, sometimes even only a few tens of meters, downwind from the sources, and because most of the particles are transported in suspension after they are emitted, potentially large populations... could be exposed."*

The name of that paper was titled, *Naturally Occurring Asbestos: Potential for Human Exposure, Southern Nevada, USA.* That article alerted news reporters to the potential danger. During their initial research, dirt clinging to car tires, dust on clothing, and collected rock and soil samples were examined. Results from all forty-three tests showed significant amounts of asbestos from the sampling sites along the McCullough Range and also in Boulder City. Such findings were not what state and county officials wanted to hear prior to beginning the massive Boulder City Bypass project and permitting major solar energy developments to be built in the Nelson Dry Lake region.

For years after the attack on Professors Baumann and Buck, reporters insisted on seeing evidence supporting the NSHD's stance on hushing up asbestos research in Clark County. The NSHD claimed the federal Center for Disease Control (CDC) had validated their position, yet the NSHD could produce no documentation supporting that claim. Therefore, reporters sent requests to the CDC to ask for verification. On December 11, 2014, reporters received the following response, *"Our division is not experienced with these types of analysis and we cannot comment on state analysis as to validity or non-validity. If you want an independent review and comments, a university might be a good choice."* Rather than admitting the NSHD's decision was not based on CDC data, state health officers put a spin on the CDC statement by saying it showed how the CDC never confirmed the findings of the UNLV research team.

What may seem to be a scandalous footnote in Clark County health history might more appropriately be seen as a warning that the priority of bureaucracies is to strengthen the economy of bureaucracies, not to protect people. Where money is involved, public health often takes a back seat until after profits are reaped. During efforts to oppose the Crescent Peak Wind project, warnings of the asbestos danger were distributed to a great many high-level members of government, including the office of the President in Washington DC, Nevada's former and newest governor, congressional representatives, and key administrators at the CDC, EPA, DOI, and BLM. Although the project was ultimately denied by the Department of the Interior on November 19, 2018, no mention was ever made by any official of the asbestos. Moreover, Nevada BLM officials never required soil samples of the Crescent Peak Wind project site as part of the environmental impact survey process, despite knowing of the issue through comments from public scoping meetings.

The bill for the Libby asbestos cleanup cost American taxpayers over 600 million dollars. Since the population of Clark County is 793 times greater than that of Libby, a southern Nevada asbestos disaster could involve an astronomical cost.

The public health emergency in Libby was declared by the EPA in 2009, after realizing that death rates between 1979 and 1998 ranged forty to eighty times higher than national averages. This past December, twenty-nine years after the closure of the mine, cleanup operations officially ceased. When unhealthy conditions are created by commerce, Libby shows there can be long lag times until the damage is repaired. In light of EPA history, had the Crescent Peak Wind project been allowed to proceed in Nevada, it could have taken a decade to recognize the ensuing devastation before any action to rectify the health issue was initiated, and possibly three decades before sufficient measures would have put an end to the problem. In the meantime, untold thousands of Nevadans could have been burying their loved ones.

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