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How the Product Defense Industry Manipulates Our Perception of Science

By Brooke Ortel

Seen from the air, Kivalina is little more than a tiny strip of sand dwarfed by the vast expanse of Arctic landscape and sea. But for approximately 400 Iñupiat residents, this tiny barrier island above the Arctic Circle is home. Pounded by storms and threatened by increased coastal erosion and the loss of protective sea ice, Kivalina is already experiencing the effects of climate change. Although Kivalina residents voted to relocate in 1992, so far they have been unable to secure the funding they need to move to a safer location. In her book *Kivalina: A Climate Change Story*, Christine Shearer chronicles the community's decision to challenge key drivers of climate change in the legal arena.

In 2008, Kivalina residents filed a lawsuit against 24 fossil fuel companies in the U.S. District Court for the Northern District of California, confronting the potent forces of government inaction and corporate manipulation of climate change science. They asserted that the defendants, including oil giants ExxonMobil, BP, and Shell, are "significant contributors of greenhouse gas emissions, exacerbating global warming and erosion in Kivalina, constituting a public nuisance under federal and state common law." The secondary claim targeted a subset of the defendant corporations, charging them with creating a false debate around the validity of climate change science. Although the lawsuit was ultimately unsuccessful in obtaining funding for relocation, it raised important questions about who should be held accountable for ensuring the safety of communities like Kivalina that are already feeling the effects of climate change.

Although the climate change story is new, the techniques used by the fossil fuel industry to cast doubt on the science threatening their profits are not. In her book, Shearer places the Kivalina lawsuit within a larger narrative that traces the development of the product defense industry (PDI) in conjunction with the historical efforts of asbestos, lead paint, and tobacco companies to create a false debate around scientific evidence showing their products were harmful. The product defense industry is comprised of lawyers, scientists, and public relations firms that industries enlist to deliberately shape how the public and policymakers perceive scientific evidence. Many of the same players instrumental in manufacturing doubt around these industries rallied to incite public doubt surrounding climate change science. Shearer's exposé of Kivalina's "climate change story" is about much more than climate change—it is about the calculated manipulation of science for corporate ends at the public's expense.

Shearer writes that the purpose of the product defense industry is to "delay and avoid government regulation, regardless of the costs to the public." These organizations use a powerful "discourse of doubt" to downplay potential health and environmental risks associated with particular industries and exaggerate the economic burden of regulation. Beginning with the asbestos industry, PDI has proved to be a powerful tool for protecting corporate interests. By shifting concerns about workers' health problems to a scientific debate about the acceptable levels of exposure to asbestos, industry leaders effectively cut the public out of the discussion of health hazards and manipulated the findings of researchers who were hard-pressed to find other sources of funding. During the 1920s and '30s, the asbestos industry financed research on the health impacts of asbestos dust, but suppressed the results, which would have jeopardized their profits. The public relations firm Hill & Knowlton became a fixture in PDI starting with its role in defending the public image of the asbestos industry, reappearing as other industries sought aid in shielding their products from scientific evidence and public scrutiny.

In response to a 1934 *Time* magazine article on the connection between lead exposure and learning disabilities, lead paint companies turned to Hill & Knowlton for assistance in countering the growing evidence for the harmful effects of lead. Hill & Knowlton's first action was to generate fraudulent paper on lead poisoning in children and then, post-writing stage, find scientists willing to claim authorship. Meanwhile, the Lead Industries Association, a trade group formed to promote a more favorable image of the industry, insisted that lead exposure only presented a health risk at high levels and placed the blame for childhood lead poisoning on poor parental supervision. Lead industry proponents also insisted that the use of tetraethyl lead in gasoline was safe because it was supposedly less toxic; this false rationale held for decades, until the 1960s, when overwhelming scientific evidence overturned the industry's invalid arguments.

A third wave of corporate dependence on PDI manifested in the tobacco industry's efforts to obscure the link between smoking and cancer, taking product defense to a new level. Once again, Hill & Knowlton played a central role in manufacturing doubt, establishing the Tobacco Industry Research Committee in 1954 and suggesting that the industry market filtered cigarettes and "low-tar" products as less injurious to health. In 1964, following a watershed report released by the surgeon general on the connection between smoking and cancer, a group of doctors affiliated with the tobacco industry testified before Congress that there was "no proof" that smoking actually posed a health risk. In response to a 1992 EPA report on secondhand smoke, the Tobacco Institute, a trade group, paid scientists to write letters to prominent scientific journals decrying the EPA's findings. In Kivalina, Shearer reports that internal documents revealed that the tobacco industry was "not just working to protect its own industry, but was also linking up with other industries to affect the national consciousness about science and risk." For instance, Philip Morris created a "national coalition to educate the media, the public, and public officials on the dangers of 'junk science'"—in other words, a foundation designed to debunk legitimate science that threatens corporate profits.

The fossil fuel industry has built on this legacy, creating an illusion of competing scientific perspectives in the climate change "debate." Two public figures in particular have played leading roles in the dispute over climate change science. Both S. Fred Singer, a physicist, and Frederick Seitz, former president of the National Academy of the Sciences, have repeatedly downplayed the scientific consensus on climate change, in some cases even citing false or nonexistent data to support their positions. Shearer points out that their actions "have been aided by U.S. media outlets that equate objectivity and balance with merely presenting different sides of an issue, even when one side is widespread scientific consensus and the other is a handful of industry-fueled contrarians, leading to measurable increases in U.S. public certainty." Seitz was responsible for the "Oregon Petition," which was designed to resemble a NAS report and listed scientists skeptical of global warming.

Such efforts to muddle the public and policymakers' perceptions of widely accepted climate change science persist at the expense of communities like *Kivalina*. In her book, Shearer quotes Kivalina resident David Frankson, who explains that, "people say global warming is not happening because they don't live our lives, or see our snow, our ice, how it's melting." Not only does the Kivalina community face physical hazards posed by climate change; they are also embroiled in a larger conflict over the corporate manipulation of science. While policymakers and the public entertain the "debate" about climate change kindled by the product defense industry, Kivalina residents experience climate change as a daily reality.