

“You have never brought up Dick Cheney’s ‘Energy Policy Act’ of 2005,” writes an impatient reader. “As I’m sure you know, this is the legislation that excludes the practice of fracking from having to comply with the Clean Air Act or the Clean Water Act and renders the EPA impotent in this area. The legislation allows oil companies to thumb their noses at the public.”

“It’ll come,” I email. “I’ll use the words of a scientist.”

Here is the phrasing of Theo Colborn, Ph.D., founder and president of *The Endocrine Disruption Exchange (TEDX)*, an environmental analyst best known for her studies on the health effects of endocrine-disrupting chemicals and the transgenerational effects (“the male predicament”) of these toxins:

“All meaningful environmental oversight and regulation of the natural gas production was removed by the executive branch and Congress in the 2005 Federal Energy Appropriations Bill. Without restraints from the Clean Water Act, Safe Drinking Water Act, Clean Air Act, and CERCLA, the gas industry is steamrolling over vast land segments in the West. Exploitation is so rapid that in less than 6 months in one [Colorado] county, 10 new well pads were built on the banks of the Colorado River, the source of agricultural and drinking water for 25 million people downstream. Spacing has dropped from one well pad per 240 acres to one per 10 acres. From the air it appears as a spreading, cancer-like network of dirt roads over vast acreage. . .”

Gas exploitation is not the only practice the 2005 legislation exempts, alas, but in Wyoming, the residents of Sublette County suffer the health hazards and environmental degradation Dr. Colborn studies in Colorado.

In recent years, oil and gas development within the Upper Green River Basin has escalated at an exceptional pace. “The resulting decline in the region’s air quality has been dramatic,” reports earthjustice.org. “Before the oil-and-gas boom, Sublette County’s residents enjoyed some of the best breathing in the country. Today, thousands of federally approved oil- and gas wells pollute the region’s air with significant amounts of ozone’s ingredients—volatile organic compounds (VOCs) and nitrogen oxides (NO_x). As a result of this development, those living in Wyoming’s rural Upper Green River Basin have recently suffered some of the nation’s highest ozone levels. Ozone, a primary component of smog, damages lungs, worsens asthma, reduces lung capacity, triggers respiratory-related hospital admissions, and increases premature deaths. These health impacts are disproportionately felt by the most vulnerable—children, the elderly, and persons already suffering from respiratory ailments.”

In winter, Sublette residents face repeated warnings about elevated ozone levels, reports earthjustice. People must remain indoors, including the children that take part in Pinedale Elementary School’s “alternative recess.” Others venture outside only to suffer burning eyes and difficulty breathing. The stress and uncertainty resulting from these conditions have further diminished residents’ quality of life.

Fracking a well uses fantastic amounts of water, and toxic chemicals are added at every stage of development. Potable and arable water resources in the West are already marginal, hence profoundly vulnerable to contamination, writes Colborn. “One well can be frac’ed 10 or more

times and there can be up to 28 wells on one well pad. An estimated 30% to 70% of the frac'ing fluid will resurface, bringing back with it toxic substances that are naturally present in underground oil and gas deposits, as well as the chemicals used in the frac'ing fluid."

Evaporation pits hold fracking fluids, used drilling muds, and the contaminated water ("produced water") that continues to surface for the life of the well, which is 20 to 30 years. "Many of the chemicals found in drilling and evaporation pits are considered hazardous wastes by the Superfund Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Upon closure, every pit has the potential to become a superfund site," Colborn says. "[T]here is no accounting for the source of the water being taken to complete these processes, how much of the fluid is water, and where and in what condition it is returned to the watershed. "

Ozone burns trees at 50 ppb, states her CD, available free from the TEDX website, *What You Need to Know About Natural Gas Production*. Western ozone plumes sometimes hold 140 to 155 ppb, more than twice what EPA has established as the maximum standard, her studies show, and these plumes can spread for 200 miles. "The trees are our keepers of the water," Colborn reminds us. When trees and vegetation suffer attenuation, so do wildlife and domestic herds that depend on them. As for humans, credible scientists have warned for years—decades!—that Spaceship Earth cruises in self-destruct mode unless and until extensive containment-measures stabilize human-made greenhouse-gas emissions.

Others have speculated on Cheney as the force behind his president's policies, but James Hoggan's *Climate Cover-Up* confines itself to "Bush administration" and "George W. Bush." It boggles the mind to estimate the human and environmental costs of the presidency, which Hoggan discusses in eight separate entries, costs that are mounting and will continue to mount. "Forget the crime of the century," Bill McKibben writes on the back cover of *Climate Cover-Up*. "This probably qualifies as the crime of the geological epoch."