

The Week That Was: 2018-08-11 (August 11, 2018)

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The Science and Environmental Policy Project

Quote of the Week: *“The greatest challenge facing mankind is the challenge of distinguishing reality from fantasy, truth from propaganda. Perceiving the truth has always been a challenge to mankind, but in the information age (or as I think of it, the disinformation age) it takes on a special urgency and importance. – Michael Crichton [H/t Tim Ball]*

Number of the Week: 2303; 18; 10; and 0

THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Heartland Energy Conference: Among the many excellent presentations at the 2018 America First Energy Conference held by The Heartland Institute, perhaps the most revealing was by Joe Leimkuhler, Vice President for Drilling for the company LLOG, L.L.C. He explained how the production has been changing over the past ten years and what is happening in the Gulf of Mexico, where extent of resources has been a mystery for years. As explained by Leimkuhler, several myths are prevalent about the oil industry, in general. These myths include:

- Oil is fungible, a commodity that is interchangeable.
- The US can achieve complete oil independence.
- There is an established physical limit to oil resources

Types of oil are identified American Petroleum Institute gravity, degrees (API°). If it is greater than 10 it is lighter than water, if less than 10 it sinks. Those with API° greater than 40, and have high yields in butane, propane, and low octane gasoline and are closer to natural gas liquids, condensate, than conventional oil. They do not need conventional “cracking.” Oils obtained by on-shore hydraulic fracturing (fracking) are typically very light (have very short CH chains). The light products of these oils are very desirable for other uses, but are unsuitable for jet engines, diesel, etc., unless they are blended with heavier oils. Also, light oils are more difficult to transport; for example, wrecks where tanker cars burst into flames when being transported by rail from the Bakken oil fields in North Dakota.

Lower API Crudes (20 to 30) have heavier yield at the middle and top-of-bottom of the of the distillation column, more octane and longer chain hydrocarbons, yielding more diesel and more jet fuel. One can see how the crude mix affects oil prices by noting the trends in low octane gasoline compared with high octane gasoline and diesel. For example, according to the Energy Information Administration, the August 6 U.S. retail price for regular was \$2.852 per gallon, the price for premium (higher octane) \$3.435 and the price for ultra-low sulfur diesel was \$3.223. As more oil from fracking enters the mix, the spread between low octane gasoline and high-octane gasoline & diesel increases. Before the light oils from fracking entered the market, lighter oils were considered more valuable than heavier oils.

The idea of complete oil independence is not practical. Many of the Gulf Coast refineries are set up to blend heavy crude oil from Venezuela with lighter crude oil from the US and Africa. Now that the oil industry in Venezuela is disintegrating from government mis-management, the refineries will need heavier crude oil from Canada, or elsewhere, to produce products such as diesel and jet fuel. Further, the political unrest in Libya and Algeria is removing their “sweet” oil from refineries, which is heavier than oil from fracking, and can be matched with South Louisiana “sweet” from the Gulf of Mexico. North America independence and / or BTU independence are very possible.

As news of new deep-water oil finds demonstrate, we simply do not know of any physical limits to oil resources, at this time. Leimkuhler’s discussion of what is being found in the Gulf of Mexico was particularly interesting.

Essentially the Gulf of Mexico is an inland sea fed by the Mississippi and the Rio Grande Rivers for millions of years. Also, about 100 million years ago the relatively shallow Western Interior Seaway divided North America. Later, plate tectonics uplifted the area draining the seaway into the Gulf and the waters off Alaska.

In recent years, deep-water off-shore production from the Gulf of Mexico has dominated US oil production from its waters. However, most of the region is dominated by thousands of feet of salt, which has been deformed by thousands of feet of sediments. Historically, seismic information stopped at the top of the salt. With recent advances in technology, oil companies are beginning to “see” what is below the salt, revealing extensive resources in oil and gas. The costs of exploration and drilling are high, with long lead times needed. Based on explanations by Leimkuhler, well productivity is high. With changes in efficiency and associated costs, he states that Deepwater drilling and completion costs are down considerably, indicating break-even points between \$50 to \$60 per barrel. The world has changed, considerably.

The big unknown is rash government regulation. The resources are limited only if imagination and innovation stop or if government regulations prevent action. Regulations are needed for clarity and safety, not to prevent innovation.

The entire operation is expensive, requiring years of commitment. The drilling may start at 10,000 feet (3000 meters) below the surface, with the intended target 35,000 feet (11000 meters) below the surface. Using simple conversations for water pressure alone, not including rock, this would mean drilling operations at pressures ranging from 300 to 1100 atmospheres.

Leimkuhler brought up the problem with drilling in Alaska, and the efforts to stop the Trans Alaska Pipeline System. The current flow of about 500,000 barrels per day (bpd) is about 25% of the peak in 1988 of 2.1 million bpd. If the flow rate drops below 350,000 bpd, there will not be enough heat in the system to keep it flowing. It will freeze, requiring its destruction as required in its permit. The Bureaucratic Scientists of the last administration claimed that the resources in Alaska are very limited. But exploration by Chevron is demonstrating they are wrong. See links under Challenging the Orthodoxy and

https://www.eia.gov/dnav/pet/pet_pri_gnd_a_epmr_pte_dpgal_w.htm

Fredrick Seitz Memorial Award: During the Heartland Conference, Ken Haapala presented the Fredrick Seitz Memorial Award to Roy Spencer for Exceptional Courage in the Quest for Knowledge. When Roy Spencer and John Christy published the method for calculating

temperature trends for the bulk atmosphere from satellite data, they were first honored then shunned. The data, hard evidence, do not support the assertions in the Charney Report, the IPCC, the US Global Change Research Program, etc., that greenhouse gases are causing a dangerous warming of the atmosphere.

Before Roy's talk at the conference, a reporter for Reuters asked him: what will he discuss? Spencer suggested the reporter attend to find out. The journalist did not attend the talk but reported on the contents of the talk anyway. See links under Challenging the Orthodoxy and Communicating Better to the Public – Make things up.

Mid-20 Century Warming? In a post in "American Thinker," SEPP Chairman Emeritus Fred Singer challenges the generally accepted warming from about 1940 to 1978, prior to the collection of data on atmospheric temperature trends from satellites. The warming may have been from a shift in the Pacific Oscillation in the mid-1970s, thus naturally caused and unrelated to carbon dioxide or other human influence. See Article #1.

Farewell Arctic Ice – Hello Wildfires: Over the past several years, the general press was loaded with stories about the traumatic effects from the summertime decline in Arctic ice. This year the ice is not declining as expected, so the general press has shifted to unprecedented warming or, in the US, wildfires. California had a wet winter leading to a green spring. Unless there is a concentrated effort to cut the spring vegetation, it will lead to summer fires. Of course, those who object to cutting lush spring growth are claiming the summer fires are caused by global warming. See links to Changing Weather and Communicating Better to the Public – Exaggerate, or be Vague?

Enemy of the Greens? Last week's TWTW discussed a digital special edition of the New York Times Magazine titled "Losing Earth: The Decade We Almost Stopped Climate Change." The report went into great deal on the personalities involved but failed to produce any hard evidence supporting its claims of dire warming from greenhouse gases. By not taking actions "to save the planet" we face a catastrophic future.

Amusingly, some Greens are attacking the New York Times for this publication because it reveals that Exxon was not covering up secret research, the basis for litigation against oil companies by municipalities and Rhode Island. According to the Greens, an article without evidence is undermining litigation without evidence – a substantial issue? See links under Problems in the Orthodoxy.

Hothouse Summer? Roy Spencer, who is an advisor for Midwest agriculture interests, stated that the US Department of Agriculture, which advises US agriculture interests, has predicted record corn yields and soybean production in the US this year.

Apparently, corn, soybeans, and wheat do not believe of their eminent demise in hothouse earth. See links under Agriculture Issues & Fear of Famine

Storage is Needed? In a surprising article, anti-CO2 James Temple, the senior editor for the MIT Technology Review, calculates the costs of providing back-up to California going to solar and wind. An advocate of alternative energy, Temple authored articles such as "Climate change could drive tens of thousands of additional suicides in North America."

Now, he realizes that batteries are not a cheap back-up? Is seizing Baja Mexico for pumped storage the alternative? See links in Problems in the Orthodoxy.

Methane Penalties: Southern California Gas Co. agreed to pay \$120 million in civil penalties and for programs to mitigate methane emissions for the October 2015 leak at the Aliso Canyon natural-gas storage field northwest of Los Angeles. The civil penalties are justifiable, but the mitigation programs are questionable.

“The company said its mitigation programs would capture methane from dairy farms and waste for use in transportation.” Also, the article reporting the fine claimed that methane is *“one of the most potent heat-trapping gases responsible for climate change.”*

As demonstrated by laboratory tests, methane is not “one of the most potent heat-trapping gases.” Water vapor is far more effective. Given the lack of understanding of the effects of methane prompts the question: does anyone in California recognize which end of the cow to mitigate? See Article # 2 and links under Below the Bottom Line.

Additions and Corrections: Last week’s TWTW may have given the incorrect impression that Galileo invented the telescope. He did not, and it is not clear who did. Apparently, it was a Dutch inventor, and Galileo, upon reading about it, developed his own telescope and was the first to record the movement of the planets, changes in the sun, and the movement of the moons of Jupiter. It was the movement of the moons around Jupiter that may have convinced Galileo that Copernicus was right in that the planets move around the sun.

Number of the Week: 2303 birds; 18 sea turtles, 10 mammals; and 0 other reptiles. The April 23, 2011 TWTW reported:

“That is the total number of dead animals with visible oil collected by the US Fish and Wildlife Service along the Gulf Coast for the year following the Gulf spill (as of April 14, 2011). This does not mean that the animals died from the oil. For example, autopsies of sea turtles indicated that some, at least, died of suffocation, most likely while trapped in the nets of fishing trawlers. What the administration called the nation’s worst ecological disaster has been something less than that, at least for major species of animals.”

We are now seeing reports that the naturally occurring red tide off Florida is killing dozens of mammals, (manatees and dolphins). sea turtles, and countless fish, crabs, etc. The red tide may be influenced by human activities such as sewage and agriculture run-off. But the current reports give some dimension to what the previous administration called the “nation’s worst ecological disaster” and to those who will object to oil exploration in the Gulf of Mexico, invoking the BP blowout. BP’s actions prior to the blow-out were inexcusable, but not the nation’s worst ecological disaster. See links under Other News that May Be of Interest and the April 23, 2011 TWTW.

SEPP’S APRIL FOOLS AWARD THE JACKSON

Nominations closed on July 30, and voting will close on August 19. Award to be announced at the annual conference of the Doctors for Defensive Preparedness, August 25-26.

The two leading candidates are Governor Jerry Brown of California, who is leading the state into a future of high electricity costs, and Governor Jay Inslee of Washington State who wants an Apollo program to replace carbon-based fuels. He and his staff are probably unaware that veterans of the Apollo program used their hard science, to include root-cause analysis, to determine that CO2 presents no pressing problem.

Others nominated include Kate Brown, Governor of Oregon; Jacinda Arden, PM, of New Zealand who wishes to eliminate nuclear and sources of greenhouse gases, including livestock; Bill Nye, the non-science guy; Angela Merkel, PM of Germany; Michael Bloomberg, former Mayor of NYC for contributions to the Paris Agreement; Al Gore, obvious; A.G. Sulzberger, publisher of the New York Times; and Lord Stern, UK, for imaginative statistical techniques, making something of low future value appear valuable today.

Still others include David King, former UK science advisor; Eric Schneiderman, former AG of New York for promoting frivolous litigation at the expense of users of fossil fuels: Catharine McKenna, Canadian Minister of Environment & Climate Change; Pope Francis; Michael Mann, promoter of climate fears, who did not get a Nobel; Paul Krugman, promoter of climate fears, who did get a Nobel in economics and promptly forgot his earlier ideas; Paul R. Ehrlich, misanthrope, who did not get a Nobel; Malcolm Turnbull, PM of Australia where NEG means No Electricity Generated; Maxine Waters, bull-horn specialist; and Ben Santer, who contributed greatly to change the UN IPCC from a scientific organization to a political pressure group.

Please send in your votes for one of these exceptional candidates.

NEWS YOU CAN USE:

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, 2013

<https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf>

Summary: <http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 2014

<http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf>

Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf>

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, NIPCC, Nov 23, 2015

<http://climatechangereconsidered.org/>

Download with no charge

<https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

http://www.sepp.org/publications/nipcc_final.pdf

Challenging the Orthodoxy

America First Energy Conference, 2018

Panel 1A. The Future of Coal, Oil, and Natural Gas

Joe Leimkuhler, LLOG Exploration

Roy Spencer Receives Frederick Seitz Memorial Award (Under Keynotes)

<http://americafirstenergy.org/>

A carbon tax: A useless solution to a nonexistent problem

By S. Fred Singer, American Thinker, Aug 9, 2018 See Article # 1

https://www.americanthinker.com/blog/2018/08/a_carbon_tax_a_useless_solution_to_a_nonexistent_problem.html

How Do You Tell If The Earth's Climate System "Is Warming"?

By Francis Menton, Manhattan Contrarian, Aug 9, 2018

<https://www.manhattancontrarian.com/blog/2018-8-9-how-do-you-tell-if-the-earths-climate-system-is-warming>

[SEPP Comment: First, choose the starting date that supports your views.]

Hothouse Earth: It's Extremely Dodgy

By David Whitehouse, GWPF, Aug 7, 2018

<https://www.thegwpf.com/hothouse-earth-its-extremely-dodgy/>

Link to paper: Trajectories of the Earth System in the Anthropocene

By Will Steffen, et al. PNAS, July 6, 2018

https://liverman.faculty.arizona.edu/sites/liverman.faculty.arizona.edu/files/2018-08/Steffen%20et%20al%202018%20Trajectories%20of%20the%20Earth%20System%20in%20the%20Anthropocene_0.pdf

Hothouse Earth

By Judith Curry, Climate Etc. Aug 8, 2018

<https://judithcurry.com/2018/08/08/hothouse-earth/#more-24250>

Hothouse Earth

By Paul Homewood, Not a Lot of People Know That, Aug 7, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/08/07/hothouse-earth/>

Defending the Orthodoxy

New Doomsday Paper: Only Worldwide Socialism Can Save the Planet From the Climate Apocalypse

By Staff Writers, GWPF, Aug 7, 2018

<https://www.thegwpf.com/new-doomsday-paper-only-worldwide-socialism-will-save-the-planet-from-climate-apocalypse/>

Link to paper: Trajectories of the Earth System in the Anthropocene,

By Will Steffen, et al. PNAS, Edited by William C. Clark, Harvard University, Approved July 6, 2018

https://liverman.faculty.arizona.edu/sites/liverman.faculty.arizona.edu/files/2018-08/Steffen%20et%20al%202018%20Trajectories%20of%20the%20Earth%20System%20in%20the%20Anthropocene_0.pdf

[SEPP Comment; The GWPF brings attention to this paper that does not recognize climate change over the Holocene, the last 11,700 years.]

Behavioural Change: The Guaranteed-to-Fail Climate Solution

By Donna Laframboise, Big Picture News, Informed Analysis, Aug 8, 2018

<https://nofrackingconsensus.com/2018/08/08/behavioural-change-the-guaranteed-to-fail-climate-solution/>

“TOP TAKEAWAY: On the Steffen, et al. paper: Whatever the future may hold, we’ll need all the technological fixes we can muster. Billions of people aren’t going to just fall into line. We won’t be voluntarily, en masse and in a timely manner, altering our behaviour because ivory tower academics think we should.”

[SEPP Comment: Another view of the paper linked immediately above.]

Study warns of looming potential for runaway global warming

By Max Greenwood, The Hill, Aug 6, 2018

<http://thehill.com/policy/energy-environment/400647-study-warns-of-looming-potential-for-runaway-global-warming>

Link to: Trajectories of the Earth System in the Anthropocene

By Will Steffen, et al. PNAS, Aug 6, 2018

<http://www.pnas.org/content/early/2018/07/31/1810141115>

[SEPP Comment: Will the Proceedings of the National Academy of Science [PNAS] ever publish hard evidence substantiating the Charney Report.]

Climate change is coming for your kids — Who knew children are more likely to die in floods, droughts, heatwaves?

By Jo Nova, Her Blog, Aug 10, 2018

<http://joannenova.com.au/2018/08/climate-change-is-coming-for-your-kids-who-knew-children-are-more-likely-to-die-in-floods-droughts-heatwaves/#more-59943>

Link to Science Daily report: Children are highly vulnerable to health risks of a changing climate

By Staff Writers, Science Daily, Aug 6, 2018

<https://www.sciencedaily.com/releases/2018/08/180806151856.htm>

Link to paper: Prioritizing the needs of children in a changing climate

By Lawrence R. Stanberry, Madeleine C. Thomson, Wilmot James, PLoS Med, July 31, 2018

<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002627>

[SEPP Comment: Before the Canadian government forced the Innuits into villages, to keep the children close to their huts, particularly in winter, the Innuits told their children of the horrible creatures that lurked in the dark.]

We won’t stop California’s wildfires if we don’t talk about climate change

Editorial, Washington Post, Aug 8, 2018

https://www.washingtonpost.com/opinions/we-wont-stop-californias-wildfires-if-we-dont-talk-about-climate-change/2018/08/08/99768218-9a80-11e8-8d5e-c6c594024954_story.html?utm_term=.969ac20054ef

Questioning the Orthodoxy

The rise of Climate superstition: Droughts, heatwaves, random noise is “proof” of anything you like

By Jo Nova, Her Blog, Aug 7, 2018

<http://joannenova.com.au/2018/08/the-rise-of-climate-superstition-droughts-heatwaves-random-noise-is-proof-of-anything-you-like/>

“What’s the difference between Rune stones, Tea leaves, Astrology and Climate Science. The first three have a long history.”

Global warming could actually be good for the UK (yes, seriously, and for Russia too)

You may feel that the long-term survival of endangered habitats is a cause far more noble than the short-term evolution of a more laid-back and fitter Britain, but there are some upsides to a warmer climate

By Mary Dejevsky, Independent, UK, Aug 9, 2018 [H/t GWPF]

<https://www.independent.co.uk/voices/global-warming-good-uk-russia-climate-change-a8485076.html>

[SEPP Comment: Is the UK going continental?]

Change in US Administrations

How Well Is EPA Actually Doing on Deregulation?

By Alan Carlin, Carlin Economics and Science, Aug 10, 2018

<http://www.carlineconomics.com/archives/4551>

[SEPP Comment: The 30-plus-year veteran of the EPA, who became a non-person in the agency for questioning the Endangerment Finding, gives his assessment of the new administration at the EPA.]

The Trump Administration’s Science Budget Memo Leaves Out Climate Science

Every similar pre-Trump memo that Pacific Standard found from the last 15 years identified climate science as a top priority.

By Francie Diep, Pacific Standard, Aug 8, 2018 [H/t Cooler Heads]

<https://psmag.com/environment/the-trump-administrations-science-budget-memo-leaves-out-climate-science>

[SEPP Comment: Given the low standards and lack of hard evidence supporting conclusions in the last report by the Global Change Research Program, the loss of funding should be expected. It is better not to have a program, than to have one that mis-leads the public by greatly exaggerating sea level rise. The exaggeration of sea level rise extends to NOAA, NASA, and other agencies that have published forecasts/projections/predictions that far exceed hard data.]

Trump Officials Helped Edit ‘Bomb Cyclone’ Report to Boost Coal

By Jennifer A Dlouhy, Bloomberg, Aug 9, 2018

<https://www.bloomberg.com/news/articles/2018-08-09/trump-officials-helped-edit-bomb-cyclone-report-to-boost-coal>

Social Benefits of Carbon Dioxide

Climate Change and Health

By Staff Writers, CO2 Coalition, August 2018

<http://co2coalition.org/wp-content/uploads/2018/07/Climate-Change-and-Health-WP-FINAL.pdf>

Gove: Climate change could provide English sparkling wine better than champagne

By Staff Writer, ITV News, UK, Aug 2, 2018

<http://www.itv.com/news/2018-08-02/gove-climate-change-could-provide-english-sparkling-wine-better-than-champagne/>

[SEPP Comment: Will it restore the UK wine industry to what it was before the Little Ice Age?]

Problems in the Orthodoxy

The \$2.5 trillion reason we can't rely on batteries to clean up the grid

Fluctuating solar and wind power require lots of energy storage, and lithium-ion batteries seem like the obvious choice—but they are far too expensive to play a major role.

By James Temple, MIT Technology Review, July 27, 2018

<https://www.technologyreview.com/s/611683/the-25-trillion-reason-we-cant-rely-on-batteries-to-clean-up-the-grid/>

What Is The Cost Of Getting To A 100% "Renewable" Electric Grid?

By Francis Menton, Manhattan Contrarian, Aug 7, 2018

<https://www.manhattancontrarian.com/blog/2018-8-6-what-is-the-cost-of-getting-to-a-100-renewable-electric-grid>

See link immediately above.

Familiar Hostility to Dissent as Climate Activists Skewer New York Times Over Climate Coverage

By John Glennon, Energy in Depth, Aug 6, 2018 [H/t GWPF]

<http://eidclimate.org/familiar-hostility-to-dissent-as-climate-activists-skewer-new-york-times-over-climate-coverage/>

“For a movement that constantly complains of being ignored by the media, this should have been a watershed moment. The New York Times Magazine feature story was one of the most influential articles ever written on climate change. But because the story veered from the climate activists’ orthodoxy, and did not lay blame at the True Villain, the activists opted to sabotage their own cause – and confirm the worst suspicions about the movement’s antagonism toward any dissent whatsoever.”

Q&A: Behind the breakdown at UN's Green Climate Fund

By Fatima Arkin, Devex, Can., Aug 10, 2018 [H/t GWPF]

<https://www.devex.com/news/q-a-behind-the-breakdown-at-un-s-green-climate-fund-93250>

“Last month, the international climate change community was left reeling amid a disastrous fallout at the United Nations’ Green Climate Fund board meeting in Songdo, South Korea. The fund failed to approve almost a billion dollars in proposed projects, with board members still tussling over how to progress with GCF’s first official replenishment process.

“On top of that, the fund’s Executive Director Howard Bamsey unexpectedly resigned, leaving GCF scrambling to find a successor. With only a few months left until December, when the annual U.N. Conference of the Parties takes place in Katowice, Poland, many wonder how the world’s largest international climate fund will overcome its challenges.

“To help answer this question, Devex caught up with the GCF South African board member and former co-chair, Zaheer Fakir, to discuss the fund’s policy gaps, the polarizing issue of replenishment, and how GCF might move forward.”

Seeking a Common Ground

California Wildfires: Is Global Warming Producing a New Normal? Part 1: Are CA Wildfires Becoming More Frequent?

By Cliff Mass, Weather and Climate Blog, Aug 9, 2018

<http://cliffmass.blogspot.com/2018/08/california-wildfires-is-global-warming.html>

Pielke on Climate #13

By Roger Pielke, Jr., The Climate Fix, Aug 9, 2018

<https://theclimatfix.wordpress.com/2018/08/09/pielke-on-climate-13/>

[SEPP Comment: Pielke was prompted by a cover story of fires in “The Economist” titled “In the line of fire: Losing the war against climate change.” Humanity has been winning since the earth warmed enough to permit agriculture and civilization.]

Review of Recent Scientific Articles by CO2 Science

Another Example of Corals Being Capable of Biologically-Mediating their Calcification to Overcome Ocean Acidification

DeCarlo, T.M., Comeau, S., Cornwall, C.E. and McCulloch, M.T. 2018. Coral resistance to ocean acidification linked to increased calcium at the site of calcification. *Proceedings of the Royal Society B* 285: 20180564, <http://dx.doi.org/10.1098/rspb.2018.0564>. Aug 10, 2018
<http://www.co2science.org/articles/V21/aug/a7.php>

A Global Warming Hiatus in Northeast China

Sun, X., Ren, G., Ren, Y., Fang, Y., Liu, Y., Xue, X. and Zhang, P. 2018. A remarkable climate warming hiatus over northeast China since 1998. *Theoretical and Applied Climatology* 133: 579-594. Aug 9, 2018

<http://www.co2science.org/articles/V21/aug/a6.php>

“Further examination of the temperature records by the authors revealed that the recent annual mean temperature decrease is dominated by a ‘remarkable cooling of winter and spring.’ The significance of *this* finding was not lost on the authors, who note that ‘the cooling climate in northeast China during the past 17 years may pose a huge challenge to the agricultural activity and natural system.’ This is because northeast China is ‘one of the most productive regions of grains in the world,’ where the grain yield amounts to approximately 20% of China's total. If the cooling trends continue, according to Sun *et al.*, ‘the instability of agricultural production will increase in the future in this important grain production region of mainland China,’ possibly leading to more frequent and more severe crop yield reductions and subsequent food shortages.”

Elevated Temperature Mitigates the Negative Impacts of Ocean Acidification on Porites Calcification

Cole, C., Finch, A.A., Hintz, C., Hintz, K. and Allison, N. 2018. Effects of seawater pCO₂ and temperature on calcification and productivity in the coral genus *Porites* spp.: and exploration of potential interaction mechanisms. *Coral Reefs* 37: 471-481. Aug 6, 2018

<http://www.co2science.org/articles/V21/aug/a5.php>

The Combined Impacts of Elevated CO₂, Salinity and Vapor Pressure Deficit on Cucumber

Shibuya, T., Kano, K., Endo, R. and Kitaya, Y. 2018. Effects of the interaction between vapor-pressure deficit and salinity on growth and photosynthesis of *Cucumis sativus* seedlings under different CO₂ concentrations. *Photosynthetica* 56: 893-900. Aug 5, 2018

<http://www.co2science.org/articles/V21/aug/a4.php>

Measurement Issues -- Surface

Tornado Trends

By Paul Homewood, Not a Lot of People Know That, Aug 8, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/08/08/tornado-trends/#more-34774>

[SEPP Comment: Exposing that NOAA’s current charts on total tornados are meaningless for comparison with the past. Before the 1970s weak tornados were not measured or reported because the equipment could not recognize them. NOAA should make that obvious but does not.]

US Instrumental Records Indicate More Heat Waves Occurred In the 1930s Than Today

By Kenneth Richard, No Tricks Zone, Aug 6, 2018

<http://notrickszone.com/2018/08/06/us-instrumental-records-indicate-more-heat-waves-occurred-in-the-1930s-than-today/>

Laughable weather station maintenance causes highest ever temperature record in Spain

By Anthony Watts, WUWT, Aug 6, 2018

<https://wattsupwiththat.com/2018/08/06/laughable-weather-station-maintenance-causes-highest-ever-temperature-record-in-spain/>

‘This Is How Global Warming Will Play Out:’ 87-Year-Old Southern California Ocean Temperature Record Broken by ... 0.2 Degrees?

By Michael Bastasch, Daily Caller, Aug 3, 2018

<http://dailycaller.com/2018/08/03/southern-california-temperature-record/>

Link to press release: Highest-Ever Seawater Temperature Recorded at Scripps Pier
Sea-surface reading of 25.9°C (78.6 °F) highest in 102 years of measurements

By Robert Monroe, Scripps Institution of Oceanography, Aug 2, 2018

<https://scripps.ucsd.edu/news/highest-ever-seawater-temperature-recorded-scripps-pier>

“Scripps has been measuring sea surface temperatures and salinity off its pier since August 1916, and the school began gathering sea floor data in 1925. Scripps still takes temperature measurements off its pier by hand, but in that time the technology used to log readings has changed dramatically.”

[SEPP Comment: What is the error range?]

Changing Weather

This silly season, why not panic about global warming?

By Andrew Montford, Spectator, UK, August 8, 2018 [H/t GWPF]

<https://blogs.spectator.co.uk/2018/08/this-silly-season-why-not-panic-about-global-warming/>

Office for National Statistics: Fewer Deaths This Summer Despite Heatwave

By Staff Writers, GWPF, Aug 9, 2018

<https://www.thegwpf.com/ons-fewer-deaths-this-year-despite-higher-temperatures/>

The influence of temperature on UK death rates

By Roger Andrews, Energy Matters, Aug 8, 2018

<http://euanmearns.com/the-influence-of-temperature-on-uk-death-rates/#more-22393>

NOAA forecasters lower Atlantic hurricane season prediction

By Anthony Watts, WUWT, Aug 9, 2018

<https://wattsupwiththat.com/2018/08/09/noaa-forecasters-lower-atlantic-hurricane-season-prediction/>

Link to forecast: NOAA forecasters lower Atlantic hurricane season prediction

Preparedness still key as more storms expected to develop

By Staff Writers, NOAA, Aug 9, 2018

<http://www.noaa.gov/media-release/noaa-forecasters-lower-atlantic-hurricane-season-prediction>

Study finds possible connection between U.S. tornado activity, Arctic sea ice

By Lois Yoksoulia, Press Release, Illinois U. Aug 6, 2018 [H/t GWPF]

<https://news.illinois.edu/view/6367/679821>

Link to paper: Exploring a possible connection between U.S. tornado activity and Arctic sea ice

By Robert Trapp & Kemberly Hoogewind, Nature, Aug 6, 2018
<https://www.nature.com/articles/s41612-018-0025-9>

Scientist Calls Out Media Misinformation on Wildfires and Global Warming

By Michael Bastasch, Daily Caller, Aug 9, 2018

<http://dailycaller.com/2018/08/09/media-misinformation-wildfires-global-warming/>

[SEPP Comment: Follow-up on report by Cliff Mass in last week's TWTW.]

Changing Climate

Four ways we know pre-Columbian America was plagued by megadroughts

Tree rings tell much but not all of the story of decades-long dry spells that transformed terrain and disrupted civilizations.

By Ashley Smart, Physics Today, Aug 1, 2018 [H/t Cooler Heads]

<https://physicstoday.scitation.org/doi/10.1063/PT.6.1.20180801a/full/>

[SEPP Comment: The types of data are Underwater tree stumps, Archaeological artifacts, Sand-dune cores, and Pollen-grain deposits.

Changing Seas

Scientists: We Lack A ‘Quantitative, Mechanistic Understanding Of How The Ocean Carbon Sink Works’

By Kenneth Richard, No Tricks Zone, Aug 9, 2018

<http://notrickszone.com/2018/08/09/scientists-we-lack-a-quantitative-mechanistic-understanding-of-how-the-ocean-carbon-sink-works/>

Ocean Air Temps Tepid in July

By Ron Clutz, Science Matters, Aug 4, 2018

<https://rclutz.wordpress.com/2018/08/04/ocean-air-temps-tepid-in-july/>

Recently, Dr. Ole Humlum reported from his research that air temperatures lag 2-3 months behind changes in SST. He also observed that changes in CO₂ atmospheric concentrations lag behind SST by 11-12 months.

Agriculture Issues & Fear of Famine

Make Agriculture Great Again: Record corn yield and soybean production predicted for 2018

By Roy Spencer, His Blog, Aug 10, 2018

<http://www.drroyspencer.com/2018/08/make-agriculture-great-again-record-corn-yield-and-soybean-production-predicted-for-2018/>

Link to news release: USDA Forecasts Record High Corn Yield and Soybean Production for 2018

By James Barrett, National Agricultural Statistics Service, DOA, Aug 10, 2018

<https://www.nass.usda.gov/Newsroom/2018/08-10-2018.php>

“NASS is the federal statistical agency responsible for producing official data about U.S. agriculture and is committed to providing timely, accurate and useful statistics in service to U.S. agriculture.”

Communicating Better to the Public – Exaggerate, or be Vague?

Europe's heat wave shows how climate change could change tourism

Scorching temperatures and extreme weather mean summer vacations may be replaced by fall vacations.

By Linda Givetash, NBC News, Aug 9, 2018

<https://www.nbcnews.com/news/world/europe-s-heat-wave-shows-how-climate-change-could-change-n898586>

Yosemite National Park's air quality worst in US due to fires: report

By John Bowden, The Hill, Aug 4, 2018

<http://thehill.com/policy/energy-environment/400400-yosemite-national-parks-air-quality-worst-in-us-due-to-fires-report>

[SEPP Comment: Not mentioned is that native Americans controlled vegetation growth by burning – in Yosemite.]

Communicating Better to the Public – Make things up.

Fake Climate News from Reuters

By Roy Spencer, His Blog, Aug 10, 2018

<http://www.drroyspencer.com/2018/08/fake-climate-news-from-reuters/>

Heat-related deaths will treble by 2050 unless government takes urgent action, warn MPs

Extreme temperatures set to kill 7,000 every year as incredibly hot summers become normal

By Josh Gabbatiss, Independent, July 26, 2018

<https://www.independent.co.uk/environment/uk-weather-heatwave-deaths-hot-temperature-climate-change-environmental-audit-committee-a8463716.html>

Questioning European Green

Hot Summer, UK Deaths and Climate Policy

By Andrew Montford, GWPF, Aug 6, 2018

<https://www.thegwpf.com/death-and-climate-change-policy/>

[SEPP Comment: Summer deaths are not increasing, but after the 2008 Climate Change Act, winter deaths rise?]

Roll-Back: German Finance Minister Pulls Plug on Stricter CO2 Emissions for Cars

By Gerald Traufettter, Spiegel Online, Via GWPF, Aug 7, 2018

<https://www.thegwpf.com/roll-back-german-finance-minister-pulls-plug-on-stricter-co2-emissions-for-cars/>

Funding Issues

Deep State: Obama's Carbon Colonialism/Corruption Continues (Part II)

By Paul Driessen and David Wojick, Master Resource, Aug 7, 2018

<https://www.masterresource.org/u-s-us-agency-for-international-development-usaid/deep-state-obamas-carbon-colonialismcorruption-continues-part-ii/>

[SEPP Comment: In distributing tens of billions, nearly half of US foreign assistance, USAID is engaged in green, neo-colonialism. Does industrial wind preserve landscapes? See part I.]

Litigation Issues

Jury awards \$289M to man who blames Roundup for cancer

By Paul Elias, AP, Aug 10, 2018

[https://apnews.com/7c8381dd72b048e889d2c1b9af4658b8/Jury-awards-\\$289M-to-man-who-blames-Roundup-for-cancer](https://apnews.com/7c8381dd72b048e889d2c1b9af4658b8/Jury-awards-$289M-to-man-who-blames-Roundup-for-cancer)

Cap-and-Trade and Carbon Taxes

A carbon tax could be a time bomb for the left

By Megan McArdle, Washington Post, Aug 3, 2018

https://www.washingtonpost.com/blogs/post-partisan/wp/2018/08/03/a-carbon-tax-could-be-a-time-bomb-for-the-left/?utm_term=.02eeced21e74

EPA and other Regulators on the March

EPA: Pruitt didn't rely on science when making comment about climate change

By Miranda Green, The Hill, Aug 7, 2018

<http://thehill.com/policy/energy-environment/400707-epa-admits-pruitt-didnt-rely-on-science-when-making-comment-about>

[SEPP Comment: The Endangerment Finding had no hard evidence, only speculation by the EPA and others. Was that science?]

Energy Issues – Non-US

The Shale Boom That Will Never Happen

By Irina Slav, Oil Price.com, Aug 8, 2018

<https://oilprice.com/Energy/General/The-Shale-Boom-That-Will-Never-Happen.html>

[SEPP Comment: Mexico's new President thumbing his nose at assets and poverty.]

Energy Issues – Australia

Doubleplusgood Greenthink

By Michael Kile, Quadrant, Aug 10, 2018

<http://quadrant.org.au/opinion/doomed-planet/2018/08/doubleplusgood-greenthink/>

Link to Photosynthesis by Chris Cunningham and Cliff Ollier

<https://www.youtube.com/watch?v=JGh3GwBYF1M>

[SEPP Comment: Has Australia's Department of the Environment and Energy (Ministry of Power) descended into an Orwellian world?]

Let's close coal plants so AGL can triple its profits

By Jo Nova, Her Blog, Aug 9, 2018

<http://joannenova.com.au/2018/08/lets-close-coal-so-agl-triples-its-profits/>

“Last year AGL made \$539 million net profit. This year, \$1,600 million. What's not to like about closing Hazelwood?”

“Profit statements confirm what we've said — closing cheap coal boosts profits for generators.”

On the NEG — Turnbull, Frydenberg: Who is running this country? You or Andrew Vesey?

By Jo Nova, Her Blog, Aug 7, 2018

<http://joannenova.com.au/2018/08/on-the-neg-turnbull-frydenberg-who-is-running-this-country-you-or-andrew-vesey/#more-59933>

Energy Issues -- US

Power restored to nearly all of Puerto Rico

By Emily Birnbaum, The Hill, Aug 7, 2018

<http://thehill.com/latino/400746-power-restored-in-most-of-puerto-rico>

“PREPA is in the process of transforming Puerto Rico's electric grid into a more resilient, modern system,' Mercader said [executive director of the Puerto Rico Federal Affairs Administration,].

‘Initially, we will phase out the use of diesel in favor of natural gas, which is cleaner and less costly. Moving forward, Governor [Ricardo] Rosselló has made the goal for 40 percent of power generation to come from renewable sources.’”

[SEPP Comment: Renewables and natural gas will not address downed transmission lines, the biggest problem.]

Washington's Control of Energy

EU wants US to drop restrictions on natural gas exports

By Timothy Cama, The Hill, Aug 9, 2018

<http://thehill.com/policy/energy-environment/401144-eu-wants-us-to-drop-restrictions-on-natural-gas-exports>

[SEPP Comment: Need change in the Natural Gas Act. A 1938 legislation giving federal control of interstate transportation and control maximum prices, expanded to exports.]

Finally! Some fuel economy common sense

But Greens go apoplectic over rule change that would have no climate or other benefits

Guest opinion by Paul Driessen, WUWT, Aug 9, 2018

<https://wattsupwiththat.com/2018/08/08/finally-some-fuel-economy-common-sense/>

Oil and Natural Gas – the Future or the Past?

Despite 'Trade War,' U.S. Natural Gas Exports Booming To Record Highs

By Jude Clemente, Forbes, Aug 5, 2018

<https://www.forbes.com/sites/judeclemente/2018/08/05/despite-trade-war-u-s-natural-gas-exports-booming-to-record-highs/#cc41f6c14ea8>

Oil Tanker Owners Are Scrapping the Most Ships in Decades

By Firat Kayakiran, Bloomberg, Aug 2, 2018

<https://www.bloomberg.com/news/articles/2018-08-01/oil-tanker-owners-scrap-most-ships-in-decades-as-imo-2020-awaits>

Return of King Coal?

China is building coal power again

Experts are calling for the government to return to cutting capacity after policy reversal, reports

By Feng Hao, Chinadialogue, Aug 3, 2018 [H/t GWPF]

<https://www.chinadialogue.net/blog/10761-China-is-building-coal-power-again/en>

Growth In Thermal Generation Continues To Outpace Renewables In China

By Paul Homewood, Not a Lot of People Know That, Aug 9, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/08/09/growth-in-thermal-generation-continues-to-outpace-renewables-in-china/>

Alternative, Green (“Clean”) Solar and Wind

US Wind Industry ‘Full Steam Ahead’ Despite Wind Catcher Cancellation

Case in point: new projects on the way from Apple and PacifiCorp.

By Julia Pyper, GTM, Aug 8, 2018

https://www.greentechmedia.com/articles/read/us-wind-industry-full-steam-ahead-despite-wind-catcher-cancellation#gs.B5_m5gE

“It’s American Wind Week, and the U.S. wind industry has a lot to celebrate.

“The American Wind Energy Association launched Wind Week last year when wind power became the country’s largest source of renewable energy capacity. Today, the industry employs more than 105,000 U.S. workers and is building more power than ever before.”

[SEPP Comment: The word unreliable is missing.]

Consumers are going to lose in Cuomo's bet on wind energy

By Robert Bryce, New York Post, July 26, 2018

<https://nypost.com/2018/07/26/consumers-are-going-to-lose-in-cuomos-bet-on-wind-energy/>

Business Daily Handelsblatt: German Wind Industry In "Serious Crisis", Could "Implode"...Consequences "Could Be Fatal"!

By P Gosselin, No Tricks Zone, Aug 7, 2018

<http://notrickszone.com/2018/08/07/business-daily-handelsblatt-german-wind-industry-in-serious-crisis-could-implode-consequences-could-be-fatal/>

Apple Is Leading a Plan to Develop Wind and Solar Power With Akamai, Etsy and Other Companies

By Kevin Kelleher, Fortune, Aug 6, 2018

<http://fortune.com/2018/08/06/apple-wind-solar-power-akamai-etsy/>

"At Apple, we're proud to power all of our operations around the world with 100 percent renewable energy," Lisa Jackson, Apple's Vice President of Environment, said in a statement. [SEPP Comment: The first winner of the SEPP Lisa Jackson Trophy is avoiding the worm in the Apple: the electricity goes on to the grid. The cost of stabilizing the electricity is paid by other consumers on the grid. If her statements are true, why does Apple need the grid?]

The Sausage-Making of Wind Power vs. the Military

By John Droz, Jr., American Thinker, Aug 9, 2018

https://www.americanthinker.com/articles/2018/08/the_sausagemaking_of_wind_power_vs_the_military.html

Good things in the wind

By Keith Norman, Jamestown Sun, ND, Aug 29, 2018

<https://jamestownsun.com/news/science-and-nature/4483384-good-things-wind>

The most visible thing happening is the construction of the new community hall. The project has an estimated cost of about \$230,000, not including volunteer labor, and was made possible with community funds provided by Geronimo Energy, the developer of the Courtenay Wind Farm project.

Alternative, Green ("Clean") Energy -- Other

EPA Says Ethanol Damages The Environment — Isn't It Time To Kill The Program?

Editorial, IBD, Aug 10, 2018

<https://www.investors.com/politics/editorials/ethanol-environment-damage/>

Alternative, Green ("Clean") Vehicles

Cadmium Green Technologies...VW May Have To Recall 124,000 E-Cars Due To Cadmium Contamination

By P Gosselin, No Tricks Zone, Aug 4, 2018

<http://notrickszone.com/2018/08/04/cadmium-green-technologies-vw-may-have-to-recall-124000-e-cars-due-to-cadmium-contamination/>

"The reason for the potential recall is that the charging unit contains traces of cadmium, a heavy metal element that can be dangerous if humans are exposed to even lower levels over a long period."

[SEPP Comment: Should EPA's Linear No-Threshold Model be applied? One possible premature death per 100,000 exposed over 70 years?]

California Dreaming

Trump officials open door to fracking in California

By Maranda Green, The Hill, Aug 8, 2018

<http://thehill.com/policy/energy-environment/400939-trump-administration-opens-door-to-fracking-in-california>

California State Treasurer Pledges More Debt to Fight the Climate Crisis

Guest essay by Eric Worrall, WUWT, Aug 10, 2018

<https://wattsupwiththat.com/2018/08/10/california-state-treasurer-pledges-more-debt-to-fight-the-climate-crisis/>

Other News that May Be of Interest

Red Tide Is Devastating Florida's Sea Life. Are Humans to Blame?

"Anything that can leave has, and anything that couldn't leave has died."

By Maya Wei-Hass, Photographs by Ben Depp, National Geographic, Aug 8, 2018

<https://www.nationalgeographic.com/environment/2018/08/news-longest-red-tide-wildlife-deaths-marine-life-toxins/>

BELOW THE BOTTOM LINE:

Video Shows Solar Panels On Roof In Netherlands Burning, Destroying Three Apartments

By P Gosselin, No Tricks Zone, Aug 5, 2018

<http://notrickszone.com/2018/08/05/video-shows-solar-panels-on-roof-in-netherlands-burning-destroying-three-apartments/>

Their burp is worse than their

By Staff Writers, Climate Change Predictions.org, Aug 9, 2018

<http://climatechangepredictions.org/uncategorized/5972>

“Scientists from NSW’s Department of Primary Industries have been working for the past 15 years to find a way to breed more efficient beef cattle. After a decade of research, the scientists came up with a blood analysis that has been developed into a commercial test for selecting bulls able to breed the most food-efficient cows and steers.

“Although it has been developed to cut farming costs, the scientists now believe the burp-reduced cattle will also help fight global warming, because methane is also a greenhouse gas, many times more powerful than carbon dioxide.

“The leader of the department’s methane research effort, Roger Hegarty, said it may be possible to develop other methane-efficient animals, including sheep. Dr Hegarty estimated 95 per cent of methane from beef cattle was belched. The rest, he said, was ‘flatulence’.” Sydney Morning Herald, 22 Jun 2006

Climate change causes mixed metaphors!

By Staff Writers, Climate Change Predictions.org, Aug 10, 2018

<http://climatechangepredictions.org/uncategorized/5928>

“Commenting on the report, United States Secretary of State John Kerry said: ‘This is yet another wake-up call. Those who deny the science or choose excuses over action are playing with fire. This is science, these are facts, and action is our only option.’

“‘If this isn’t an alarm bell, then I don’t know what one is. If ever there were an issue that demanded greater cooperation, partnership, and committed diplomacy, this is it.’” Sydney Morning Herald, 12 Sep 2013

ARTICLES:

1. A carbon tax: A useless solution to a nonexistent problem

By S. Fred Singer, American Thinker, Aug 9, 2018

https://www.americanthinker.com/blog/2018/08/a_carbon_tax_a_useless_solution_to_a_nonexistent_problem.html

The Chairman Emeritus of SEPP writes:

“Mr. Fred Krupp is president of the Environmental Defense Fund (EDF). He claims that “capitalism will solve the climate problem” (op-ed, WSJ, July 22, 2018). EDF pays him the princely sum of about \$350,000 USD. Evidently, his duties include spreading the idea that EDF, an aggressive environmental non-profit, is “pro-market.”

“Krupp asserts that the climate warmed in the final two decades of the 20th century, thus following the 1988 predictions of Dr. James Hansen, former head of NASA-GISS (Goddard Institute for Space Studies), notorious for his violent opposition to emission of CO2.

“But Krupp is quite wrong, and so are the predictions of Dr. Hansen. There is no warming at all after about 1940, ‘til the El Niño event of 1998 (which had nothing to do with CO2). Therefore, there is no climate problem to be ‘solved.’

“It turns out that the warming reported by surface weather stations is fake – it is entirely an instrumental artifact, caused by drastic changes after 1980 in the way in which (surface) temperatures were measured – as discussed in detail in a research paper by noted meteorologist Dr. Joseph D’Aleo.

“Krupp further asserts that satellites show atmospheric warming. Wrong again! Prof. John Christy has shown that neither satellites nor balloon-borne radiosondes exhibit warming in the final decades of the 20th century – nor does any other data source.

“A carbon tax?

“Krupp espouses ‘market-based mechanisms.’ All of this sounds persuasive until you discover that he really wants a carbon tax – the wrong remedy, especially for a nonexistent climate problem.”

2. Southern California Gas Agrees to Settlement for 2015 Methane Leak

Utility to pay \$120 million in civil settlement for gas leak that drove thousands of families from their Los Angeles homes

By Timothy Puko, WSJ, Aug 8, 2018

<https://www.wsj.com/articles/southern-california-gas-agrees-to-settlement-for-2015-methane-leak-1533758383>

SUMMARY: The journalist writes:

A California utility has agreed to a \$120 million civil settlement for a massive gas leak that drove thousands of families from their Los Angeles homes.

*Southern California Gas Co. will pay civil penalties and for programs to mitigate methane emissions for the October 2015 leak at the Aliso Canyon natural-gas storage field northwest of Los Angeles. The company has already pleaded no contest to criminal charges for the leak, which released 109,000 metric tons of methane near the community of Porter Ranch, according to state air officials. **The new settlement requires the company to mitigate the effects of that methane, authorities and the company announced Wednesday.***

‘There is no excuse for what happened,’ California Attorney General Xavier Becerra said in a statement. ‘This leak undermined our crucial work to reduce greenhouse gas emissions and protect our people and the environment.’

***The company said its mitigation programs would capture methane from dairy farms and waste for use in transportation.** The settlement money will also pay for a long-term health study on the effects of the leak, and the settlement requires the company to take several other steps to improve safety and publicly monitor methane levels around the facility.*

*The Aliso Canyon underground site is the fifth-largest such gas-storage facility in the U.S. and is essential to the region’s power industry. **It gushed methane—one of the most potent heat-trapping gases responsible for climate change—for 15 weeks,** leading California to declare a state of emergency while locals reported headaches, nosebleeds, rashes and other woes. It eventually led to a federal review that called for a sweeping safety overhaul of more than 400 underground natural-gas storage fields.”*

If approved by the Los Angeles Superior Court, the settlement will resolve all claims by several governments, but not personal-injury lawsuits from thousands of citizens, or what may be uncovered in ongoing investigations.

“SoCalGas is delivering on our commitment to the Governor and the people of California to fully mitigate the methane emissions from the leak at our Aliso Canyon facility,’ said Bret Lane, president and chief operating officer for the company, in a statement. ‘The settlement will also help California meet its ambitious climate goals.’”

[Boldface added to the above.]
