Goodbye Blue Sky, Goodbye Sun

Global Warning: Goodbye Common Sense

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Since October 2009 the media have begun to leak the possibility of geoengineering techniques which might have to be used to mitigate the ill-effects of global warming/climate change. Whether one believes that global warming is myth or fact, *geoengineering is fact*. And defacto! We allege that it is already well-underway.

While the term "geoengineering" is still being refined, the Council on Foreign Relations defines it as "Any of a variety of strategies, such as injecting light-reflecting particles into the stratosphere, that might be used to modify the Earth's atmosphere-ocean system in an attempt to slow or reverse global warming." (from the CFR *Unilateral Geoengineering* workshop May 5, 2008).

Here, at the outset, I submit that my first remedy to the sickened condition of Earth is for our species to wake up from our coma! We are trained and educated away from common sense and personal responsibility. And we are starved for the kind of nourishment which *simplicity and generosity* might provide. For now, simplicity is gobbled up by excess. Our sense of entitlement shapes our solutions. How can we speak "truth to power" until we speak truth to ourselves? Without addressing the root causes of our condition how can we hope to discover *real* remedies? The Bonnefire Coalition imagines a world in which we *share Earth's bounty with all Beings*. It's only common decency. It's only common sense.

The Bonnefire Coalition was initiated to stop the pluming jet trails, what NASA calls Persistent Jet Contrails. PJCs are those trails which are laid down, daily and globally, often in Xs, cross-hatches and parallel lines. As they expand, they combine to haze the Sky and dim the Sun. While we have been busy investigating PJCs, another geoengineering acronym has sprouted in the laboratories of the global scientific community. SRM, which is the focus of this article.

SRM - Solar Radiation Management is one of the most disturbingly inventive of the geoengineering techniques. By definition, "SRM and related strategies seek to directly intervene in the climate system, without directly affecting atmospheric greenhouse gas concentrations." (from Ken Caldeira's testimony - *Geoengineering: Assessing the Implications of Large-Scale Climate Intervention*, before the House Committee on Science and Technology, November 5, 2009). By another definition "SRM aims to offset the warming caused by the buildup of greenhouse gases in the atmosphere by reducing the amount of solar energy absorbed by the Earth." (from Lee Lane's testimony - *Researching Solar Radiation Management as a Climate Policy Option* before the House Committee on Science and Technology, November 5, 2009).

On November 5, 2009 the U.S. government went public with its geoengineering schemes as the House of Representatives conducted Hearings before the House Committee on Science and Technology (find the testimonies at http://science.house.gov/Publications/hearings_markups_details.aspx?NewsID=2668).

These testimonies describe possible "future" geoengineering techniques to abate global warming. This government excursion into a national public forum gives us a most rare opportunity to say, "No! You may not!!" This emphatic assertion is especially critical right now, as we allege that at least one of the suggested "solutions" is already implemented: The SRM Aerosol Program.

The SRM Aerosol Program can be implemented by several methods. The one of particular concern to us is administered by military jets, high in the stratosphere, laying down particles of Sulfur Dioxide (Council on Foreign Relations *Unilateral Geoengineering* May 5, 2008 workshop) which effectively haze the Sky and dim the Sun. We submit that this is likely the program which witnesses have been observing and recording for years now, as a daily and global occurrence. Whether with SO2 or another particulate we can't assert for certain. As we are not privy to the details of the government's aerosol programs we have to make educated guesses. "Other candidates include hydrogen sulfide (H2S) and soot." (Crutzen, 2006) (from Lee Lane's November 5, 2009 testimony). "A fairly broad range of materials might be used as stratospheric scatterers" (Caldeira and Wood, 2008) (from Lee Lane's November 5, 2009 testimony). "Potential types of particles for injection include sulfur dioxide, aluminum oxide dust or even designer self-levitating aerosols..." (CFR *Unilateral Geoengineering* May 5, 2008 workshop).

"Cloud Cover Modification," is another Solar Radiation Management (SRM) technique which uses particulates to reflect sunlight back into space, away from Earth. For this method of modifying marine stratocumulus clouds "the level of Sulfur Dioxide emissions required to counteract the effects of double CO2 concentrations was estimated at 31,000 tons per day, an amount equivalent at the time to the SO2 [Sulfur Dioxide] emissions from a coal-fired plant for an entire year." (Council on Foreign Relations *Unilateral Geoengineering* May 5, 2008 workshop)

Now, wait a minute! That really rattles my common sense. Is the Sun so pesky, so overbearing that we must, yet again, haze the Sky with Sulfur Dioxide? I thought we were trying to reduce, if not eliminate, SO2 emissions and their injurious effects.

Out of fairness to the Council on Foreign Relations, they do admit that this method "would have massive environmental impacts in the form of acid rain." If so, why are we even *discussing* this method?

In his November 5th testimony, while assessing the risks of various geoengineering techniques, Alan Robock, a professor at Rutgers University, states that "with brightening of marine clouds there is...a possible large impact on the oceanic food chain due to less solar energy needed for plankton at the base of the food chain to grow." *Less solar energy* [which is] *needed for plankton at the base of the food chain?!* If common sense prevailed this SRM technique, which risks our food chain, would be dismissed without consideration.

Further, if "brightened clouds" over the oceans steal sunlight from fundamental life processes, what losses are incurred when the global Aerosol Program hazes the Sky? In a critical breach of common sense some of our scientists seem to have forgotten that we *need the Sun*. We need *direct* Sunlight for photosynthesis and other fundamental life processes! Yes, there are creatures who flourish in darkness and without oxygen, but we are *not* those creatures, nor are countless other sentient beings who share this planet with

us. It is astounding, really, that so simple and significant a concept seems to have completely escaped some of the scientific community.

Before continuing with other risks of the proposed Aerosol Program - which, again, we allege is already implemented - I want to interject another sun-related solution which was discussed by the Council on Foreign Relations at its May 5, 2008 *Unilateral Geoengineering* workshop.

"Land Cover Modification - A few large continental nations might be able to produce significant changes in planetary albedo [Earth's ability to reflect incoming light] through massive modifications in land cover. This would entail replacing dark forest cover with much lighter and more reflective cover such as grass lands or steppe." "Replacing" is a euphemism for deforestation. Deforestation? At a time when the planet is said to be suffocating from Carbon Dioxide? Didn't we learn as kids that forests are our friends because they breathe in our Carbon Dioxide and give back to us our Oxygen?

Where, in this muddle of methods, is the *public awareness* of what is in place (and in store) for us? Spaceship Earth has Dr. Suicidal Tendency at the wheel. Where are the media and investigative journalists to inform us? Where is the public debate and scrutiny? Could we at least go through the motions of Environmental Impact Statements, including *Public* Hearings?

It may be that the Congressional Hearings of November 5th are setting the stage to legitimize existing programs. Even so, I repeat, the public nature of these Hearings does provide us with a rare opportunity to say, "No! You may *not*!!!" Restraint and sanity are called for here, not this deeper, wider Strangelove science. It's small comfort, for us whistle-blowers but at least we can no longer be marginalized as "conspiracy theorists." Indeed, some of our worst fears and suspicions are now part of the public record.

Returning now to Professor Robock's November 5, 2009 testimony before the House Committee on Science and Technology, and focusing on Solar Radiation Management technology, he lists seventeen risks.

- 1)SRM could produce drought in Asia and Africa, threatening the food and water supply for billions of people. [Practical racism aside, the Earth's atmosphere is a closed system. What goes around, comes around. BH]
- 2) It will not halt continued ocean acidification from CO2.
- 3) It would deplete ozone.
- 4) It would increase dangerous ultraviolet radiation.
- 5) With SRM the reduction of direct solar radiation and the increase in diffuse radiation would make the sky less blue and produce much less solar power from systems using focused sunlight. [I feel compelled, by my own passionate nature, to comment on the dispassionate delivery of this death sentence! BH]
- 6) Any system to inject particles or their precursors into the stratosphere at the needed rate would have large local environmental impacts.
- 7) If discontinued there would be much more rapid warming, much more rapid than would occur without geoengineering.

- 8) If a series of volcanic eruptions produced unwanted cooling, geoengineering could not be stopped rapidly to compensate.
- 9) Geoengineering would put permanent pollution above astronomers' telescopes.
- 10) There will be unexpected consequences.
- 11) There will be human error with sophisticated technical systems.
- 12) Geoengineering would lessen the public will to address climate change with mitigation.

[This could be #1, if prioritizing by common sense remediation.]

- 13) Do humans have the right to control the climate of the entire planet to benefit them, without consideration of all other species?
- 14) Potential military use of geoengineering technology raises ethical concerns.
- 15) What if some benefit from geoengineering technology while others are harmed?
- 16) Who would control geoengineering systems?
- 17) The costs of implementing geoengineering would be less than the costs associated with the potential damages of geoengineering.

It is important to add two more problems caused by impeding sunlight from reaching Earth:

- 18) SRM will affect physical and mental health. The Dimming of the Sun and increasing manmade cloud cover are already associated with a rise in Ricketts and other vitamin-D-deficiency diseases, as well as depression and asthma.
- 19) SRM will affect life processes (including photosynthesis) which are vital to agriculture, forestry, other natural-resource-based industries and all natural systems.

We at the Bonnefire Coalition hope this information will get you started, that you'll research further on your own and that you'll trust your native intuition to guide your non-violent actions.

Please help the Bonnefire Coalition:

- Use this SRM article, the SRM flyer and the SRM cartoons to Bring SRM into public awareness.
 Stop geoengineering schemes.
 Promote common-sense alternatives.
- write letters-to-the-editors
- contact and inform legislators (local, state and federal) by letters, email, phone and in person U.S. Congress switchboard 1-866-220-0044
- connect with church groups, peace groups, environmental groups, schools (at all levels), astronomers, meteorologists, farmers, agriculture organizations, solar power companies, medical practitioners, Project 350, end-hunger projects, holiday/hospitality/tourist industry, biologists, botanists and so on
- use all available forms of media, with press releases, interviews, blogs and so on
- organize meetings, vigils, protests, sit-ins, marches to state and federal government offices

- use art, music, theatre, humor to get the points across
- offer contests to promote ingenuity, creative problem-solving and common sense solutions
- engage in conversations with friends, neighbors, coworkers

Please expand this list and let us know, by email, what actions you are taking. bonne_fire@yahoo.com

The Bonnefire Coalition California Skywatch P.O.Box 499, Redwood City, California 95470

The Bonnefire Coalition's website is accessible at www.californiaskywatch.com and at www.agriculturedefensecoalition.org

Historical Perspectives on "Fixing the Sky" November 5, 2009 statement (before the US House of Representatives Committee on Science and Technology) Dr. James Fleming, Professor and Director of Science, Technology and Society, Colby College

Geoengineering: Assessing the Implications of Large-Scale Climate Intervention November 5, 2009 testimony (before the House Committee on Science and Technology) Ken Caldeira, Carnegie Institution of Washington, Department of Global Ecology, Stanford, California

Geoengineering the Climate: Science, Governance & Uncertainty November 5, 2009 testimony (before the House Committee on Science & Technology) John Shepherd of the National Oceanography Centre, University of Southampton, United Kingdom

Researching Solar Radiation Management as a Climate Policy Option November 5, 2009 statement (before the House Committee of Science and Technology) Lee Lane, Co-director of the American Enterprise Institute Geoengineering Project

If you would like to read the U.S. Congressional Testimony given on November 5, 2009 or access other information on geoengineering issues please use the links below:

http://agriculturedefensecoalition.org/ Use Search Engine "Geoengineering"

United States House Hearing on Geoengineering – November 5, 2009: http://science.house.gov/Publications/hearings_markups_details.aspx?NewsID=2668

Professor Alan Robock's testimony:

http://democrats.science.house.gov/Media/file/Commdocs/hearings/2009/Full/5nov/Robock_Testimony.pdf