Statement on Aerosols and Drought for DOE 5/27/09 in Sacramento

BIO

The author has a MS degree in Zoology, BS in Forestry, and minors in other natural sciences, such as biology, fishery science, chemistry, geology, wildlife management, botany, watershed management, recreation management, soil science, conservation, and ecology. He is retired after 35 years in public service in conservation of resources and is presently teaches at College of the Siskiyous. Statements herein do not necessarily reflect administration of COS, but the science is verifiable.

AEROSOLS

The two major types presently in use are silver iodide, falsely purported to make rain, and unknown compounds of aluminum, barium, and strontium that come out of the air in rain and snow. Their purpose is likely to prevent global warming or for a military purpose.

WHY AEROSOLS CAUSE DROUGHT

These compounds generally cause drought for the main reason that persons using them do not understand the chemical process called *heat of condensation*. When water condenses, heat is released into the air. This lowers the dew point and humidity and actually prevents further condensation. Thus, rainmaking has been proven to fail well over 90% of the time it is tried, and studies show 95% of the rainmaking projects usually show reduced rain in the watersheds treated with silver iodide.

However, the efforts persist and the mythology is that at least the companies are doing *something*. People do not know the investment in silver iodide fails 95% of the time.

Similarly, most other chemical molecules put into the air also cause drought. The micro droplets formed are too small to rain, and the heat of condensation raises the air temperature to a point that further condensation does not take place. The micro-particles of aluminum are a perfect example of a drought-promoting agency.

However, a larger particle, such as pollen or common wood smoke is already fairly heavy, and rain condenses quickly enough that rain or snow falls before *heat of condensation* cancels out the natural rain process.

If we don't get rain, we have no hydroelectric power, not to mention agricultural failure.

AEROSOLS ARE A THREAT TO SOLAR ENERGY COMPANIES

The aluminum dust can occasionally be seen in the air with a powerful light at night, or seen and wiped off a car's front window with your finger. It is too fine to distinguish any particles in most cases, but is a very fine whitish or grayish powder.

Several folks have noted that several days after heavy contrail activity, their solar cells on their houses fail to perform. If washed, they go back up to normal. The dust is robbing every one of solar energy generation, and probably a threat to the solar cell industry. In

cases of remote solar cells, they will get too dusty to be practical because someone always has to go out and wash them off, and that's too expensive.

We must choose between aluminum aerosols to combat global warming and photovoltaic cells for electricity. The technologies are incompatible, and the former appears foolish.

PROOF OF AEROSOLS

The EPA lab reports are coming in from all over the West Coast. While the military and Waldo Herger constantly deny any aluminum and say it is a hoax, <u>attached are several lab</u> reports from rain gauges, snow packs, and surface waters that once were pure. If Mr. Herger with his vast scientific knowledge is correct, then will he please also explain where all the aluminum is coming from over such a widespread area at such density.

Obviously it is not a point source of pollution if it is widespread.

With snow on the ground, and rain wetting the land, it is not clouds of dirt getting into our water.

Especially after 10,000 years of it not being there, aluminum suddenly appeared during the George Bush years. Some local soils have 1% aluminum in them, but that does not explain the sudden appearance in water supplies and rain gauges.

Our sampling methods are correct. I have experience and training in this and the samples are accurate and reasonable care was taken. See the three attached EPA Lab reports and nine attached letters of inquiry.

ACTION REQUESTED

Start the NEPA process to analyze the cumulative and synergistic effects of silver iodide and the aluminum particulate compound now being deposited on private and public lands. People should not be allowed to dump metallic powders onto my land without my consent, nor upon pubic lands without the express permission and public acknowledgement and request of the involved governmental land agency, specifically including the USDA and USDI. I want an EIS and EIR documenting the possible effects on public energy, health, and agricultural resources. I want no further silver iodide nor aluminum on my property nor public property or water supplies until the NEPA process is done and all possible side effects are accounted by all other relevant agencies. **This includes effects on our energy supplies caused by aerosol induced drought.**

Sincerely,

Francis W. Mangels 5/27/09 736 Pine Ridge Av. Mount Shasta, CA 96067