## Evidence of Covert Tropospheric Coal Fly Ash Spraying: A Scientific Response

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In the June 25, 2015 issue of *Current Science*, I authored an Article entitled "Aluminum poisoning of humanity and Earth's biota by clandestine geoengineering activity: implications for India" [1]. ..... has criticized the paper. His criticism received falls into the following categories: 1) Criticism of the veracity of rainwater Aluminum/Barium/Strontium measurements presented; 2) Criticism of my observations, and of my knowledge and capability as a scientist; 3) Criticism of literature cited; 4) Criticism of the manner and tone of my article; 5) Criticism of the relevance to India; and, 6) Contradiction of my results and conclusions. My point by point response is as follows:

The veracity of rainwater Aluminum/Barium/Strontium measurements I presented [1] was criticized as being "unreliable data" from "non-scientists"; the 3-element fingerprint was deemed "ridiculous", and "it is obvious these data were fabricated". Moreover, aluminum was misrepresented as being "naturally present in rainwater as rain washes dust in the air". That observation is incorrect: In addition to the collector's centrifuging and/or filtering, the certified laboratory protocol for measuring dissolved aluminum in water specifies filtering, which removes any dust present.

Atmospheric water leaches chemical toxins from the previously unidentified troposphericemplaced particulates which can be measured in post-spraying rainwater. I have shown [1] that the Al/Ba and the Sr/Ba ratios observed in such rainwater match the range of corresponding ratios extracted into water from coal fly ash laboratory leaching experiments [2]. In other words, for those three elements the aerosolized particulates have the same leach characteristics as coal fly ash.

In response to the above criticisms, I present an 8-element fingerprint based upon San Diego post-spraying rainwater sampling I did myself and had analyzed by two certified commercial analytical laboratories. These data are shown in Figure 1 along with the rainwater Al/Ba and Sr/Ba data from [1] and with the range of laboratory leach data of Moreno et al. [2] for coal fly ash samples obtained from twenty-three different European sources and their average values.

Coal fly ash from different locations varies somewhat in its chemical composition, as well as in the composition of the post-extraction water leachate; the average values shown in Figure 1 tend to even out the few extreme values observed. The point to be made here is that the San Diego rainwater extract of tropospheric-emplaced particulate matter matches element-by-element the laboratory water-extract of coal fly ash within the range of observed variations, and more precisely matches the average laboratory leachate values [2] as do the rainwater data presented previously [1]. Said another way, the tropospheric-emplaced matter has the same water-leach characteristics as coal fly ash for at least eight elements, which is indeed strong evidence of the identification of the aerosolized substance as coal fly ash. When academic laboratories with their high sensitivity capabilities repeat the measurements, I posit, additional elements will be added to the fingerprint.

The observations I presented [1] as well as my knowledge and capability as a scientist were the subject of criticism. In the published article [1], I presented three photographs of aerosol-particulates being sprayed into the troposphere, the lower portion of the atmosphere that mixes with the air San Diegans breathe. I was criticized as having "a complete ignorance of the physics of contrails (apparently the author has no idea that contrails persist and transform to cirrus clouds in a high-humidity environment)". Such a comment does not represent truthfully what I wrote about San Diego [1]: "The air is warm and dry, not at all conducive for the formation of ice crystals [contrails] from high-altitude jet aircraft exhaust." Notably, observational evidence exists to refute the "contrail" misrepresentation.

Coal fly ash sprayed into the lower atmosphere can form impermanent cirrus-like artificial clouds which rapidly diffuse forming a persistent white haze that scatters sunlight in the otherwise blue San Diego sky. (Figures 2 and 3) Sometimes the haze is so thick as to have a brownish cast. By contrast, the ice crystals that comprise contrails diffuse, evaporate, and disappear; they do not form either a persistent white haze or a persistent, dense brownish haze, especially in the warm, dry San Diego air.

The attack on my scientific ethics, capability, and intent is inexplicable from the standpoint of academic debate, but may be understandable in light of a 1967 United States Central Intelligence Agency (CIA) dispatch [3] marked "psych" for "psychological operations" or disinformation and "CS" for the CIA's "Clandestine Services". The dispatch employed the term "conspiracy theorist" and stated in part: "The aim of this dispatch is to provide material countering and discrediting the claims of the conspiracy theorists, so as to inhibit the circulation of such claims ... To employ propaganda assets to and refute the attacks of the critics.... Our ploy should point out, as applicable, that the critics are (I) wedded to theories adopted before the evidence was in, (II) politically interested, (III) financially interested, (IV) hasty and inaccurate in their research, or (V) infatuated with their own theories."

The criticisms made by the individual to which this response is addressed appear to be crafted in accordance with that CIA dispatch [3], including but not limited to the following remarks: "The general tone of the article is just strange, and inadequate in a scientific journal....The article uses very low quality, unscientific references such as various conspiracy theorist web sites and their unreliable data.... Reading the entire paper, it is clear that Dr. Herndon's goal is to spread a known conspiracy theory called the 'chemtrail conspiracy theory', while providing completely invalid and unscientific evidence for it. This conspiracy theory has no scientific basis, and it is pure fabrication."

The websites I referenced in [1] are a few of many whose primary purpose is to bring to public attention the pervasive covert operation that sprays a previously unidentified, now known to be toxic substance into the air that people must breathe. The websites provide a preponderance of evidence that this is a coordinated global operation, at least by and among Western countries. By contrast, in the scientific literature "geoengineering" is discussed as if it might be a possible future activity [4] and academic scientists, even those who study atmospheric phenomenon, remain totally silent about the conspicuous ongoing tropospheric spraying. There is a historic precedent of physicians and scientists remaining silent, and in instances becoming complicit, in activities later deemed crimes against humanity [5, 6].

Aerosolized coal fly ash does not respect political boundaries and may contaminate the air that people of other nations breathe, their environments and lifeforms. Contrary to the critical, pejorative remarks which I address here, there is a direct relevance between observations made in San Diego [1] and those made by Jigyasu et al. in India [7], specifically their discovery of high levels of chemically mobile aluminum in the Gomati River, a tributary of the Ganga River. The relevance stems from the not-readily-known observation that water extracts aluminum in a chemically mobile form from coal fly ash. I posited that the primary source of the observed highly mobile aluminum is aerosolized coal fly ash. I further suggested ways to investigate that proposition and to ascertain the extent of foreign aerosolized coal fly ash versus pollution from India's coal burning utilities. An investigation would benefit India because chemically mobile aluminum 1) is implicated in neurological diseases and 2) has the potential to perturb the delicate biological equilibrium in Ganga River that makes it relatively safe for ritual bathing.

What, one might ask, is the purpose of this covert Western-nation global activity that involves spraying toxic coal fly ash into the troposphere? If it is an attempt to combat supposed global warming, the result is questionable. Although the aerosolized coal fly ash might block some sunlight in the daytime, it retards loss of heat at night. Spraying fine-grained particulates into the air inhibits water nucleation by dilution thus impeding rainfall, which is contrary to off-setting global-warming. Coal fly ash does that plus it is an anhydrous substance that absorbs water thus further impeding rainfall and adversely impacting the environment. Who knows? But one thing is certain: No human endeavor is worth exposing humanity and Earth's biota to the savage

consequences of pervasive coal fly ash spraying and the concomitant release of multifarious toxins. In my view, that is an act of inhumanity, a barbarian folly.

## References

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**Figure 1.** Herndon's San Diego rainwater measurements normalized to barium (red circles) for comparison with Moreno et al.'s [2] coal fly ash leachate measurements of European coal fly ash samples: range (black line) and average values (blue diamond). Internet published rainwater measurements (small black circles) from [1]. Statistically, Herndon's San Diego rainwater measurements and Moreno et al.'s average values, shown in this figure, at a 99% confidence interval have the same mean (T-Test), and, at a 95% confidence interval, have the same variance (Levene's Test).



**Figure 2.** White haze produced by tropospheric-sprayed coal fly ash taking place at the time of this photograph. Note the scattering of sunlight. Contrails do not yield this result. The blue strip at the top is a portion of the San Diego sky that is unpolluted by coal fly ash emplacement; note the contrast in color.



**Figure 3.** White haze produced by tropospheric-sprayed coal fly ash taking place at the time of this photograph. Note the scattering of sunlight. Contrails do not yield this result. The blue strip at the top is a portion of the San Diego sky that is unpolluted by coal fly ash emplacement; note the contrast in color.