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Mr. Mike Party, President, and
Mr. David Curtiss, Executive Director
AAPG Executive Committee
Tulsa, Oklahoma

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Gentlemen:

A number of my associates just directed my attention with considerable disapproval to a recent editorial in [*The Explorer*](#) (September, 2019) by Francois Marechal, current **President of AAPG's Division of Environmental Geosciences (DEG)**. I read it and I too was appalled by its statements and overall coverage, to such an extent that I must bring my views to the attention of the DEG Executive Committee.

I am a long-term stakeholder in the AAPG, EMD, and DEG since the 1970s. I am a **Founding Member of EMD in 1977; Past President of EMD: 2010-2011; Chair, EMD's Uranium (Nuclear and REE) Committee (2004-Present*)**; Over the years I have been elected a Fellow of SEG; Fellow GSA; Fellow AIG; Fellow and Chartered Geologist GSL; *EurGeol*; and RM of SME; I currently hold Professional Licenses in TX, LA, WY, WA, and AK; I am currently serving as Vice President-Eastern Texas for the [Texas Section of AIPG](#), and I am currently serving as Senior Principal and Chief Geologist (Mining) / Chief Hydrogeologist (Environmental) for [I2M Consulting, LLC](#); Past District Geologist for Teton Exploration Div., United Nuclear Corporation; Past Principal Consultant to Texas Eastern Nuclear, Inc., and Past Regional Technical Manager and Chief Hydrogeologist for DuPont Environmental Services, Central Region (10 States). Since the mid-1990s, I was in private practice and in 2010 joined I2M Associates (2018 now I2M Consulting), LLC, incorporated in Seattle, Washington, with an office in Houston, Texas. I have been serving as a professional geologist/ hydrogeologist for the past 53 years ([more](#)).

With the above background in mind, I want you to know that I do not submit the following comments lightly. Francois Marechal claims that the causes of climate change (aka global warming) need to be studied and debated further, when in reality it is well known that the causes have been studied and identified over more than 20 years and all credible climate scientists are in general agreement. Further, and apparently, Marechal has not bothered to read any of the actual reports on the subject.

Further, geologists, especially environmental geoscientists, owe a duty to the public to openly support health and safety positions that impact the general public, not unlike the astronomer who has a duty to report to the public that an asteroid or comet is on track toward Earth. Further, it does not "best serve society by stepping away from predictions of environmental and climatic cataclysms."

On the contrary, the current "brouhaha" is created by those climate deniers who have ignored and rejected "good scientific analysis and discussion" of the mountain of information available indicating the current human-caused climate change. We took steps to fix the ozone layer by banning certain aerosols (and the hole in the ozone layer over the Antarctica is closing); we can also take steps to mitigate global warming.

It is clear to me that: 1) our burning of fossil fuels {oil and gas and coal} to produce electricity and to operate cars, trucks, trains, planes, etc.), 2) our management of oil and gas production {[fugitive emission of methane](#)}, 3) [our management of livestock {cattle, sheep, etc}](#), and 4) our operation of electrical equipment that [releases SF₆](#) (and the associated fugitive emissions of such from almost all electricity-driven devices with controlling switchgates) must be eliminated in transition to climate-friendly energy sources, along with implementing improved management practices in field operations in capturing fugitive emissions from all sources created by society, and eliminate greenhouse gases that are being released to the atmosphere.

Lastly, and the most troubling, is that Marechal attempts to lull our young geoscientists into complacency by ensuring them that they will "sleep at night with confirmation that the planet will still be habitable when they grow up" This is unconscionable and a bare-faced lie. They and their children will be the ones who will begin to bear the brunt of the changes in climate if nothing is done soon! He is attempting to pass the buck to our young geoscientists. The sky will be falling, to one extent or another, sooner rather than later, depending on what we begin to do now.

As you may remember, President George H.W. Bush clearly identified climate change issues in the 1980s, but then the Koch Brothers (via funding of the Cato Institute) introduced doubt about climate change that has since created a generation of "climate-change deniers." The real question now is why do the climate deniers (Marechal and many Republicans in Congress and the oil and gas Industry) hold such untenable positions now? In my opinion, [the answer is complex](#), but at the very root of it are money and fear. Geoscientists holding such positions do not want to rock their personal financial boats (i.e., do not want to go against the position of their oil and gas company employers for fear losing their jobs). Some Republicans also fear losing their investments or support of the oil and gas companies (also having been leveraged by the oil & gas companies, their financial supporters and/or associated stakeholders in one of many ways).

There is no debate. It is not arrogant to state unequivocally that we have the results of the climate scientists, but the deniers wishing to debate these results represent the height of arrogance and self-centered narrow-mindedness. Marechal may wish to debate (to delay any serious action even further), but he, like other climate deniers before him, has no credible basis on which to counter the climate scientists and only offers what amounts to nothing less than obfuscation and subterfuge to defend their positions. This is unethical and shameful. Since 2009, I have identified 280 peer-reviewed articles, papers, and reports from scientists, governments, and international panels that confirm the pressing climate issues ([more](#)).

What is clear now is that we will always need oil and gas as feedstocks, but no longer for burning; so too geologists will have employment to explore for oil and gas as well as critical minerals and

a range of other commodities, and so too by generations of geologists to come. Our economy depends on them to explore Earth and off-world as we begin to venture into space.

I understand that an Ad Hoc Committee on Climate Change consisting of AAPG members proposed a comprehensive position on climate change (global warming) to the AAPG Executive Committee in February of this year. Notice how this position compares with those of the Geological Society of America ([more](#)), and which is similar to other geological societies in the world. But also note how it contrasts with those views expressed by Mr. Marechal in his editorial, in representing the DEG.

With the publication of Marechal's Editorial in *The Explorer*, the damage has been done. Therefore, I call on the AAPG Executive Committee to censure Mr. Marechal and to prohibit him from inflicting such misinformation on the young professionals of the AAPG in the future.

I also call for the DEG Executive Committee to disavow the editorial in *The Explorer* by expressing their opposition to Mr. Marechal's Editorial as not representing the opinions of a vast majority of the members of the DEG.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael D. Campbell', written over a horizontal line.

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