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Tucson, AZ 85740

19-October-2020

Information Quality Guidelines Staff
USEPA Headquarters
1200 Pennsylvania Ave., NW
Mail Code 2821T
Washington, DC 20460
Email: quality@epa.gov

Re: Information Quality Act Correction Request Regarding Dissemination of Flawed Information Concerning the Terms "Greenhouse Effect" or "Greenhouse Gas"
-- Revised (19-10-2020) to correct misspelling of Stefan-Boltzmann.

In the following, "Agency" will be a reference to your Agency within the US Government.

I am submitting this request for correction under the Information Quality Act (IQA), 114 Stat. 2763, section 515, as implemented through the Agency and the Office of Management and Budget (OMB) guidelines.

Paraphrased from the Federal Register, Volume 67, Number 36, Friday, February 22, 2002/Notices Page 8459, Under the general definition of "Objectivity", there are two distinct areas of concern. The first is that the Agency in question accurately reports existing information in a clear, complete, and unbiased manner. The second is that the information itself is accurate and reliable and has been arrived at in an unbiased manner.

The second of these is alluded to in the summary text of the same document on page 8453, "…presented in an accurate, clear, complete, and unbiased manner *and as a matter of substance, is accurate, reliable, and unbiased"* (my italics).

It is my contention that the second of these, i.e., the accuracy of the information itself, in reference to the terms "Greenhouse Effect", "Greenhouse Gas", and related concepts, has not been met.

As has been detailed in the recently published book, *Air of Doubt (ISBN: 979-8697917329),* the genesis of the concept of a "Greenhouse Effect" (also called a "Natural Greenhouse Effect") is by noting that the empirically measured global mean surface temperature of the Earth over continental crust, *~288K (15C or 59F),* differs from that computed through the Stefan-Boltzmann equation using empirically measured ground-level incident solar flux, *240 W/m^2*. The

Stefan-Boltzmann equation computation is somewhat trivial,

$$\begin{aligned} \mathrm{T} &= 64.8 \cdot \Phi \cdot \\ &= 64.8 \cdot 240 \cdot \\ &= 64.8 \cdot 3.936 \\ &= 255K\ (-18C\ or\ 0.4F). \end{aligned} \qquad \mathbf{1}$$

In this, the *64.8* factor is, in essence, the Stefan-Boltzmann constant. Obviously, the symbol Φ represents ground-level insolation.

From this, it is easily seen that the measured surface temperature *(288K)* is *33K* greater than that provided by insolation *(255K)*. Therefore, there must be some contribution to Earth's surface temperature other than insolation. This is the basis of the "Greenhouse Effect Theory" that postulates an atmospheric contribution to the surface temperature that involves absorption and reradiation of thermal radiative flux emitted from the surface.

This is manifestly incorrect in that one contribution to Earth's surface temperature is not properly accounted for. That is, the geothermal heat from Earth's interior is missing. The mean global geothermal flux has been well-measured for some time. It is common knowledge in the field that the magnitude of that flux over continental crust is approximately *0.065W/m^2.* Using the Stefan-Boltzmann equation above and this well-known mean flux value we obtain

$$\begin{aligned} \mathrm{T} &= 64.8 \cdot \Phi \cdot \\ &= 64.8 \cdot 0.065 \cdot \\ &= 64.8 \cdot 0.505 \\ &= 33K. \end{aligned} \qquad \mathbf{2}$$

What this computation does is indicate that for Earth's surface to radiate away the *0.065W/m^2* of geothermal flux as it reaches the surface, the surface must have a temperature of *33K.*

There is no argument within the scientific community that the geothermal flux is ignored in the calculation. The argument for doing so is because of the relative difference between the magnitude of the solar flux and that of the geothermal flux. However, this analysis requires the simple addition of the fluxes in the Stefan-Boltzmann equation, i.e.,

$$\begin{aligned} \mathrm{T} &= 64.8 \cdot \Phi \cdot \\ &= 64.8 \cdot (240 + 0.065) \cdot \\ &= 64.8 \cdot 3.936 \\ &= 255K. \end{aligned} \qquad \mathbf{3}$$

This naïve summing of the two fluxes violates the first law of thermodynamics (conservation of energy). The mathematical technique used to solve for temperature in a solid with two constant heat sources is to 1) treat each source independently of the others, 2) compute the temperature distribution for each source, and then 3) sum the solutions. This is known as the

superposition principle. It is not simply a mathematical technique. It is, in fact, required by the physics of the problem. In this instance, since the temperature at any place in the solid is equivalent to the internal energy there, to not obey the superposition principle is to violate the first law of thermodynamics. Adding the heat fluxes violates the superposition principle.

Therefore, the entire, exact, global mean surface temperature of planet Earth is completely explained by properly including both solar and geothermal fluxes through standard mathematical techniques and the Stefan-Boltzmann equation. As such, the "Greenhouse Effect" is unconditionally disproven. Further, sans a "Greenhouse Effect", the concept of a "Greenhouse Gas" is equally disproven.

Therefore, it is requested that correction be made to all documents, electronic or paper based, published by the Agency, that includes the terms "Greenhouse Effect", "Greenhouse Gas", or any related concept. Such correction should address the fact that the Effect has been disproven or the document in question should be removed from public view and replaced with an accurate analysis of Earth's surface temperature.

Since the term itself is in wide use throughout the Agency, focus on a specific document is unhelpful. However, a relatively accurate and complete list of flawed documents can be found via a search engine focused on the Agency's URL and the terms "greenhouse effect" or "greenhouse gas".

Using the Google search engine, the Agency has approximately *64,200* flawed documents. I've attached a portion of the results of that search.

It must be stressed that widespread adoption of the flawed Greenhouse Effect Theory has affected virtually every citizen of the United States. Rapid response to this request for correction can only help to resolve the deleterious effect it has had on those citizens.

Sincerely,

Frank A Tinker, Ph.D.
ftinker@airofdoubt.com

Google "greenhouse effect" OR "greenhouse gas" site:epa.gov

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Images for "greenhouse effect" OR "greenhouse gas" site:epa.gov

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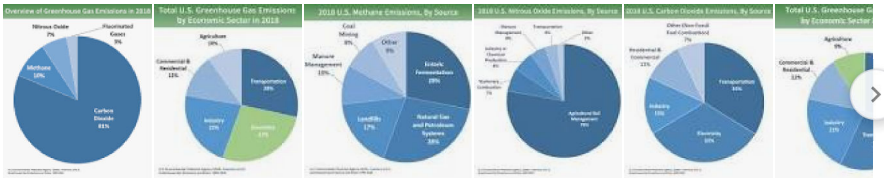

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Guide G een use Gas Managemen f Small ... - EPA

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Federal Fleets s ow-Gree ho se Gas Em tt Veh cles ...

Overv ew. Sect o 141 of the 200 E er y l depe de ce a d Sec r ty Act (EISA) req res federal a e c es to acq re low **greenhouse gas** (GHG) em tt ...

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I ve tory of US Gree ho se Gas Em ss o s a d S ks ... - EPA

Sep 10, 2020 — V ew the 2003 U.S. **Greenhouse Gas** I ve tory developed by the U.S. over me t to meet U.S. comm tme ts der the U ted Nat o s ...

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AP-42, CH 14.1: Em ss o s From So ls - Gree ho se ... - EPA

Var o s a r c lt ral so l ma a eme t pract ces co tr b te to **greenhouse gas** em ss o s. The se of sy thet c a d or a c fert l zers adds tro e to so ls, ...

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Em ss o Factors for Gree ho se Gas I ve tor es - EPA

F el Type. Heat Co te t (HHV). CO2 Factor. CH4 Factor. N2O Factor. CO2 Factor. CH4 Factor. N2O Factor. mmBt per short to k CO2 per mmBt CH4 per ...

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Gree ho se Gas Report Pro ram a d the U.S. I ve tory of ...

Nov 25, 2019 — These so rces are fo d across all se me ts of the U.S. eco omy. EPA s respo s ble for character z **greenhouse gas** em ss o s s two ...

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Feb 11, 2020 — V ew the I ve tory of U.S. **Greenhouse Gas** Em ss o s a d S ks: 1990–201 (p bl shed 2019), developed by the U.S. Gover me t to meet ...

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Re lat o s for Gree ho se Gas Em ss o s from Passe er ...

A 12, 2020 — The at o al pro ram for **greenhouse gas** em ss o s (GHG) a d f el eco omy sta dards for l ht-d ty veh cles (passe er cars a d tr cks) ...

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O Apr l 2, 2018, the Adm strator s ed the M d-term Eval at o F al Determ at o wh ch fi ds that the model year 2022-2025 **greenhouse gas** sta dards are ...

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Gree ho se Gas Eq vale c es Calc lator - Rev s o H story ...

Mcf of at ral as: The em ss o factor has bee pdated to 0.0549 metr c to s of CO2/Mcf. The prev o s val e was 0.0551 metr c to s. Home electr c ty se: The ...

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Dec 17, 201 he righ side of he graph, radia ive forci g has bee co ver ed o he A ual **Gree house Gas** I dex, which is se o a value of 1.0 for 1990.

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Emissio s es ima es i he I ve ory of U.S. **Gree house Gas** Emissio s a d Si ks are recalcula ed each year for he e ire ime ra ge of he i ve ory (1990 o ...

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Impor a ce of Me ha e | Global Me ha e I i ia ive (GMI) | US ...

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Coal a d Coke. A hraci e Coal. 25.09. 103. 9. 11. 1. . 2, 02. 27 . 40 shor o s. Bi umi ous Coal. 24.93. 93.28. 11. 1. . 2,325. 274. 40 shor o s.

www.epa.gov › global-mi iga io - o -co2-gree house-...

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Dec 4, 2019 Be wee 1990 a d 2015, global o -C 2 emissio levels rose by abou 29%. · I 2030, he o al global o -C 2 GHG mi iga io po e ial is ...

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H RP Refineries | reen ouse as Reporting Program ...

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reen ouse as earc | Enviro acts | EPA

0 - 23,000,000 metric tons CO2e: Min: Max: Filter by tatus. Facilities are color coded to designate t eir verification and reporting status as o EPA's latest data ...

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Final Rule or Mandatory Reporting o reen ouse ases - EPA

EPA is promulgating a regulation to require reporting o **greenhouse gas** emissions rom all sectors o t e economy. T e final rule applies to ossil uel suppliers ...

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Apr 22, 2020 — T is rating reflects ve icle tailpipe emissions o carbon dioxide (CO2), t e most prevalent **greenhouse gas** (H). · e icles t at score a 10 are ...

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May 18, 2020 — The report Global Non-CO2 **Greenhouse Gas** Emission Projections & Mitigation Potential: 2015-2050 provides emissions projections and ...

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greenhouse **gases** effect

greenhouse gas **emissions**

sources of greenhouse **gases**

methane greenhouse gas

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global greenhouse gas **emissions by sector**

greenhouse gas effect

human activities that contribute to greenhouse **gases**