R.13-11-005 Order to Show Cause Against Southern California Gas Company Issued December 2, 2019

Sierra Club Exhibit Exhibit SC-06

002_Sierra_Club-SCG_01_R.13-11-005

Carney, Kevin P.

From: Carney, Kevin P.

Sent: Thursday, June 4, 2020 3:42 PM **To:** Williams, Ted; Ranfone, Jim

Cc:

Subject: RE: Methane Emission Study

We were thinking 2 weeks, but we want to be sensitive to your workload. We are in the early stages of this process so we have some flexibility.

From: Williams, Ted <TWilliams@aga.org> Sent: Thursday, June 4, 2020 2:01 PM

To: Carney, Kevin P. <KCarney@socalgas.com>; Ranfone, Jim <JRanfone@aga.org>

Cc:

Subject: [EXTERNAL] RE: Methane Emission Study

 *** EXTERNAL EMAIL - Be cautious of attachments, web links, and requests for information ***

Thanks, Kevin,

Let me know when you would need our review. We'll put it "Into the queue," which includes finalizing the review of the Sierra Club/UCLA study report and now the report, "Health Effects from Gas Stove Pollution," which we discuss in

tomorrow's AGA BECS Committee "Friday Update."

Ted

Ted A. Williams | Senior Director, Codes and Standards

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7313 | F: 202-824-9123 | twilliams@aga.org

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to nearly 69 million customers throughout the nation.

From: Carney, Kevin P. < KCarney@socalgas.com>

Sent: Thursday, June 4, 2020 4:33 PM

To: Williams, Ted < TWilliams@aga.org >; Ranfone, Jim < JRanfone@aga.org >

Cc:

Subject: RE: Methane Emission Study

Hi Ted,

I've attached the Marc Fisher CEC report again, hopefully that will help with opening it. I would love to have you review it and comment on it. I agree that a universally accepted Methane Measurement protocol is critical. Using the methodology these "researchers" are using virtually guarantees a bad result and make replication a non-starter.

Thanks, Kevin Carney CSF Staff



213.244.8598 Office 213.231.8410 Skype

kcarney@SoCalGas.com ML GT18B4

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From: Williams, Ted < TWilliams@aga.org Sent: Thursday, June 4, 2020 12:28 PM

To: Carney, Kevin P. <KCarney@socalgas.com>; Ranfone, Jim <JRanfone@aga.org>

Cc:

Subject: [EXTERNAL] RE: Methane Emission Study

*** EXTERNAL FMAIL - Be cautious of attachments, web links, and requests for information ***

Hi, Kevin,

While I can't seem to open the document, I'm familiar with it. We are prepared to review these studies, and I believe GTI might be as well. Paul Glanville of GTI would be the contact there. I was asked to review the Stanford study and after talking to Paul and other GTI staff, our conclusion is that our immediate focus should be on developing a test protocol that produces repeatable measurements. On the Stanford study, I didn't get much further than the appendix description of their sampling methods involving use of a "duct blaster," which is a very course means of gathering volumes of gases and especially for making small concentration measurements. Also, in discussing these studies (specifically the Stanford study for water heaters, the GTI study for instantaneous water heaters, and the University of

Illinois analysis for a broader set of appliances), the need for a standard sampling protocol appeared acute. We have discussed such a project with the U. S. Department of Energy, and they are considering funding such work.

What we've learned is that, due to low repeatability and general lack of efficient means of reliably measuring methane selectively, we as an industry and maybe as society are not technically prepared to report on methane emissions with any high confidence. Our recommendation to GTI for its presentation at the ACEEE "Hot Water Forum" (now postponed for later this summer or beyond) that it pull back from presenting its data and instead focus on the problems and potential solutions for improving measurements. GTI, while citing all of the difficulties, has stated that the measurements and estimates from the three earlier mentioned studies produce "about the same results." That's little comfort if all three approaches are "agreeing" for the wrong reasons.

All that said, if you'd like us to review the study once I open it, I'd be happy to do so. But please give me a timeframe for when you need the results. Separately, I had reviewed the University of Illinois study for Deanna Haines of your company several months ago. The bottom line there is that for furnaces and boilers, the methane emission numbers were exaggerated because they were assuming "short cycling" of the burners, exaggerating the feasible unburned methane estimates during ignition cycles by a factor of two or three.

Let me know how you would like to proceed.

Ted

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From: Carney, Kevin P. < KCarney@socalgas.com>

Sent: Thursday, June 4, 2020 2:57 PM

To: Williams, Ted < TWilliams@aga.org>; Ranfone, Jim < JRanfone@aga.org>

Cc:

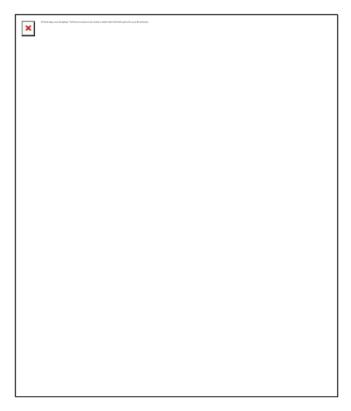
Subject: Methane Emission Study

Hi Ted and Jim,

I hope all is well on you side of the country. Our side may be slipping into the ocean, but then that might be an improvement for the rest of the nation. I can't recall what the AGA and possibly GTI is doing to refute the attached study but we met to discuss approaches internally and it occurred to me that you would be the best people I know to examine/replicate this study. At the outset, the study is flawed in that the sample size is ridiculously small and limited to San Francisco and environs which is not representative of the state or the country in building style, method, or age. Additionally, gas appliances were studied whether or not they were correctly/legally installed. A similar article from Stanford claims that a study was conducted and the photos in the article show a gas fired water heater incorrectly installed, which of course, will produce an inaccurate result (In spite of asking to see the actual study, I still have not

seen one). Lastly, the Marc Fisher, CEC study seals the buildings, which at a minimum restricts available combustion air and measures emissions, apparently attributing any methane present to an appliance or piping source, disregarding usual considerations such as plumbing drains, decaying organic material food spoilage, plants, etc., or living organisms such as humans, animals, bacteria, etc. So Do you have any thoughts about how to conduct a study to refute this CEC study and/or is there one in progress already?

BTW I've included the link to the Stanford "study", as I said before it is actually an article about a study and not an actual study. Note the second photo that shows him taking a sample from a water heater installed outside under an eave with no vent.



Water heaters' methane leaks are high, but fixable https://urldefense.proofpoint.com/v2/url?u=https-34 phys.org news 2020-2D04-2Dheaters-2Dmethane-2Dleaks-2Dhigh-2Dfixable.html&d=DwlBaQ&c=oBiQyooBvnd4iujXa1WDRw&r=UvDZig3EJBdZP-HgUC84f2enxSwdyASsl4n-BX6QzuU&m=-3jlNPYvuF0gKy9fbVaB7J8jnFJW8nX8vX7e5Xxs-88&s=oC JlCo5POhfM3cNvqye5bxJHNQeeEbNFjeJcsy3b2E&e=



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