

Citizens for Responsible Oil & Gas, Ventura County www.cfrog.org

October 30, 2015

To the California Air Resources Board (CA ARB),

Citizens for Responsible Oil and Gas (CFROG) supports the adoption and widespread use of a more scientificallydefensible methane GWP value that is consistent with methane's expected lifespan in the atmosphere. Since methane does not remain in the atmosphere for 100 years, it is not reasonable for CA ARB to continue using a methane GWP based upon a 100-year interval. Even use of a 20-year methane GWP is questionable, given that methane has an approximate atmospheric half-life of 7 years and a generally stated lifespan of 12 years. CA ARB use of a 10-year interval methane GWP makes the most sense to us, as such use would comport CA ARB policy with the actual science concerning methane *and* provide California with a strong, short-term policy lever to control the progression of global warming. Such a policy lever may be essential in the near future to help prevent the onset of positive climate change feedbacks that might dramatically accelerate the warming of our planet.

In any case, CFROG believes strongly that polluters should be required to pay for the methane pollution they generate, based upon a methane-into-CO2-equivalency conversion algorithm that incorporates a 10-year interval methane GWP (at best) or a 20-year interval methane GWP (at worst). Whatever methane GWP constant is used should be based upon the most recent IPCC GWP values.

CFROG believes that these requests are reasonable and prudent for the following reasons.

1: Use of a 10-year methane GWP would promote a much more rapid reduction in annual methane emissions than continued use of a long-interval methane GWP. Annual methane emissions need to be reduced as quickly as possible if we are to slow down the rapid rate of planetary warming that is occurring. The IPCC (AR5th, 2013) has concluded that at the 10-year timescale, the current global release of methane from all anthropogenic sources will exceed (slightly) all anthropogenic carbon dioxide emissions in driving the rate of global warming; that is, methane emissions will be as significant as carbon dioxide emissions in driving the rate of global warming in the near future. At the 20-year timescale, the IPCC notes that total global emissions of methane will be equivalent to over 80% of global carbon dioxide emissions. [Source: Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, page 719, Figure 8.32,

https://www.ipcc.ch/report/ar5/wg1/]

2: The rationale for using a short-interval methane GWP is provided within the CA ARB Draft SLCP Reduction Strategy document itself: "Climate change is no longer a problem to be defined simply in terms of a legacy we leave to our grandchildren or impacts in the year 2100. It is affecting us now, and will only accelerate in our lifetime. Due to the urgency of the issue, and the need to recognize the costs and benefits of addressing it immediately, we use 20year GWPs in this report to quantify emissions of SLCPs." [See page ES-6.]

The rationale is also supported by recent actions taken by the California Legislature and Governor Brown. The State of California, in AB 1496, has now officially acknowledged the importance of considering the heat-trapping impacts of methane over a much-shorter timescale: "The people of the State of California do enact as follows: SECTION 1. The Legislature finds and declares all of the following: (a) Methane is . . . an extremely potent greenhouse gas, with 20 to 30 times the warming power of carbon dioxide over a 100-year period and more than 80 times over a 20-year period."

For these reasons, CFROG recommends that CA ARB adopt a yr2013 Intergovernmental Panel on Climate Change (IPCC) 10-year interval methane Global Warming Potential (GWP) constant for use in all annual, short, and mid-term interval methane-to-CO2 equivalency conversion calculations.

CFROG further requests that CA ARB require the use of the most current IPCC 10-year interval methane GWP constant in all of its various programs (cap and trade [c&t], compliance offsets under c&t, greenhouse gas [GHG] inventories, existing compliance offset protocols under c&t, future compliance offset protocols that have been proposed for incorporation into c&t, pollution permits, etc.) with regard to all annual, short, and mid-term interval calculations, analyses, and emission values.

CFROG repeats for the record: methane polluters should be taxed or fined for the methane pollution they generate, with the tax or fine based upon a methane-into-CO2-equivalency conversion algorithm that incorporates a 10-year interval methane GWP (at best) or a 20-year interval methane GWP (at worst).

Sincerely,

CFROG Board of Directors

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