



**Michael J. Rubio**

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March 24, 2016

The Honorable Mary Nichols  
Chair  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**RE: Draft Aliso Canyon Methane Leak Climate Impacts Mitigation Program**

Dear Chairman Nichols:

Chevron U.S.A. Inc. (Chevron) appreciates the opportunity to comment on the Draft Aliso Canyon Methane Leak Climate Impact Mitigation Program (Mitigation Program).

Chevron is concerned with the Air Resources Board (ARB) staff proposal on page 6 of the Mitigation Program to use a 20-year time horizon for converting the methane emissions to CO<sub>2</sub>e rather than the 100-year time horizon. **Using a 20-year time horizon would take methane emissions out of the context of the entire California regulatory program, overstating the CO<sub>2</sub> equivalent emissions associated with the Aliso Canyon methane leak relative to the CO<sub>2</sub> equivalent emissions for an equal amount of methane from other sources in the statewide inventory.** There is no scientific rationale to say that methane from the Aliso Canyon leak is a more potent greenhouse gas than methane from other sources in the state.

A 100-year global warming potential (GWP) value is the current internationally accepted standard used across myriad State and Federal regulatory regimes including the ARB's statewide emissions inventory, AB 32 Scoping Plan and the Cap-and-Trade regulation. The factor change would defeat the internal consistency of the state's policy.

ARB's rationale on Page 6 for this change is summarized in the paragraph below:<sup>1</sup>

In connection with the mitigation program, ARB recommends using the 20-year GWP for methane assigned by AR 5. This figure properly incorporates current scientific knowledge, underscores the influence of SLCPs as immediate climate-forcing agents, and emphasizes the need for immediate action on climate change. The anticipated consequences of climate change by 2050 and 2100 are sufficiently dramatic and irreversible to make it inappropriate to tether mitigation here to methane's impacts over an even longer time horizon. Using the AR 5 20-year

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<sup>1</sup> Air Resources Board, March 14, 2016, *Aliso Canyon Methane Leak Climate Impacts Mitigation Program, Draft*

GWP of 84, the approximately 100,000 tons of methane emitted in the Aliso Canyon leak amount to about 8,000,000 metric tons of carbon dioxide equivalent (8 MMT CO<sub>2</sub>e).

ARB specifically states that they are concerned about climate change consequences in 2050 and 2100 – i.e., the 100 year timeframe. Based on this concern, using the 100 year GWP would be more appropriate. The Intergovernmental Panel on Climate Change (IPCC) Report supports both factors.<sup>2</sup> These factors were developed to allow comparisons of different GHGs for policy making purposes, and ARB's revised methodologies will deviate from the standards used by EPA and countless other international agencies.

If ARB insists on choosing the 20 year horizon for methane, then a 20-year horizon for CO<sub>2</sub> would be a fair comparison. In such a comparison, the effect of CO<sub>2</sub> is very small.<sup>3</sup> As a result California should take the very small radiative forcing of CO<sub>2</sub> into account and reconsider all of its policies with respect to CO<sub>2</sub>.

This change will also impact how ARB responds to any other one-time events. If ARB chooses the 20-year time horizon for methane in this case of a mitigation plan, then ARB should use that same 20-year methane GWP for future mitigation plans related to one-time releases of other GHGs. For example, if using a 20-year time horizon, a future one event releasing 1,000,000 tons of CO<sub>2</sub> could be mitigated by eliminating  $1,000,000 / 84 = 11,905$  tons of methane, rather than the  $1,000,000 / 21 = 47,620$  tons of methane that would be required based on the standard 100-year GWP.

As this example demonstrates, changing one factor without changing the entire inventory and the AB 32 1990 goal overstates the impacts. The change is not trivial. Using the 20-yr GWP of 84, which is four times the 100-yr GWP of 21, makes the emissions estimates from the regulation appear to be four times the emissions estimates of standard GHG programs like EPA's Greenhouse Gas Reporting Program (GHGRP), California's GHG Mandatory Reporting Regulation (MRR), and California's Cap and Trade Program. It also makes the costs for this mitigation plan appear to be four times smaller when compared to other GHG programs.

#### **ARB revalidated its use of the 100 year value at the January MRR workshop.**

At the January 15, 2016 ARB workshop on the California GHG Inventory, staff explained that it currently uses GWP values from the IPCC 4th Assessment Report as this is, "consistent with national and international organizations" (slide 8). The IPCC uses the 100 year GWP value. Diverging from national and international scientific norms should be pursued through a formal, deliberate and transparent rulemaking process.

Chevron firmly believes that the lack of a standardized GWP approach between the various AB32 programs is inappropriate, non-transparent and ultimately will cause confusion among stakeholders

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<sup>2</sup> The IPCC Fifth Assessment Report, Working Group I: The Physical Science Basis, Chapter 8. Figure 8.29

<sup>3</sup> Ibid.

when comparing the cost-effectiveness and efficiency of the various programs established by ARB and the international community.

We hope that staff will maintain consistency across the climate change policy and use the IPCC 4<sup>th</sup> assessment GWP values. Chevron thanks the ARB for considering our brief comments on the Draft Aliso Canyon Methane Leak Climate Impacts Mitigation Program.

Please contact me or K.C. Bishop, Chevron's governmental relations representatives at 916-325-3000, should you have any questions.

Sincerely,

*(submitted via email)*

Michael Rubio

cc: Mr. Richard Corey  
Ms. Edie Chang  
Dr. Steve Cliff