



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

March 17, 2016

Members of the Governing Board:

Chairman

Dr. William A. Burke

Speaker of the Assembly Appointee

Vice Chairman

Ben Benoit

Councilmember, Wildomar
Cities of Riverside County

Michael D. Antonovich

Supervisor, Fifth District
County of Los Angeles

John J. Benoit

Supervisor, Fourth District
County of Riverside

Joe Buscaino

Councilmember, 15th District
City of Los Angeles Representative

Michael A. Cacciotti

Councilmember, South Pasadena
Cities of Los Angeles County/
Eastern Region

Joseph K. Lyou, Ph.D.

Governor's Appointee

Larry McCallon

Mayor, Highland
Cities of San Bernardino County

Judith Mitchell

Councilmember, Rolling Hills Estates
Cities of Los Angeles County/
Western Region

Shawn Nelson

Supervisor, Fourth District
County of Orange

Dr. Clark E. Parker, Sr.

Senate Rules Committee Appointee

Dwight Robinson

Councilmember, Lake Forest
Cities of Orange County

Janice Rutherford

Supervisor, Second District
County of San Bernardino

The Honorable Mary D. Nichols, Chair
California Air Resources Board
1001 "I" Street
PO Box 2815
Sacramento CA 95812

RE: Development of the Aliso Canyon Climate Impacts Mitigation
Program

Dear Chair Nichols,

The Aliso Canyon Gas leak has been an environmental disaster for the local community. It has significantly impacted the health of nearby residents, created stress and disruption in the lives of thousands, affected the education of thousands of children, and impacted nearby local businesses. The SCAQMD received 2,340 odor complaints from nearby residents during this event, and established an extensive monitoring program in the impacted areas. While the well was capped on February 12th, the longer term community impacts from this event will need further investigation, along with the global environmental impacts. The resulting release of an estimated 190 million pounds of methane will persist in the atmosphere for well over a decade with implications for both climate and air quality.

SoCal Gas Co has stated their intent to mitigate the release of these GHG emissions, and as directed under the Governor's January 6, 2016 emergency proclamation, the California Air Resources Board (CARB) is tasked to develop a draft action plan for this mitigation effort. CARB staff presented the background and accelerated development schedule for the Aliso Canyon Climate Mitigation Program at your Board Meeting on February 18, 2016. The draft plan was released on March 14, 2016, with a final plan being released by March 31, 2016. Our Board is concerned that the mitigation funds and projects are not currently required to be focused on the affected communities nor within the South Coast Air Basin (Basin).

At the SCAQMD's January 8, 2016 Governing Board meeting, Supervisor Michael D. Antonovich introduced a motion to adopt the attached resolution, which was approved by all Board members present (Attachment-A). As stated in the Resolution, the Governing Board of the South Coast Air Quality Management District requests that funds for the greenhouse-gas (GHG) mitigation program be dedicated, to the maximum extent feasible, to mitigation projects for the benefit of Porter Ranch, which is the Southern California community directly impacted by the air emissions due to the gas leak, and if projects are not feasible in Porter Ranch, to be dedicated to projects in Southern California. This Resolution and corresponding letter were sent to you on January 21, 2016 (Attachment A).

In addition to the collection of GHG mitigation funds as described in the Governor's Executive Order, SCAQMD and several other agencies have filed lawsuits that may result in the collection of civil penalties. SCAQMD Governing Board Members have expressed their intent to allocate the penalties collected toward projects that benefit Porter Ranch and the surrounding communities. The SCAQMD Governing Board encourages the other plaintiff agencies, including CARB, to similarly commit any penalty funds to benefit the most affected neighborhoods.

This mitigation program could and should have significant co-benefits for toxic and criteria pollutant reductions, especially if targeted at reducing short lived climate forcing pollutants. As you know, the population of the Basin accounts for nearly half of the state's population despite occupying only 7% of the state's land area. The Basin accounts for over a quarter of the State's directly emitted greenhouse gases reported by facilities. These emissions, combined with the Basin's over 17 million vehicles, two of the largest ports in the world, and significant waste streams result in the Basin having GHG emissions likely to amount to 30-40% of all GHG emissions in the state. The activities that lead to GHG emissions also result in the Basin having localized toxic impacts and non-attainment of federal standards for ozone and fine particulate matter.

Attached is a list of example GHG mitigation projects that potentially could be implemented (Attachment B). These examples are just some of the possibilities that exist and an RFP process would identify the best GHG mitigation projects along with co-benefits for the local Porter Ranch community and the Basin. Choosing GHG programs through an RFP process will be the best way to select worthy projects of this type. For example, projects could include measures that provide support for locally impacted businesses, decrease pollutant exposure for schoolchildren, and implement new technologies. These projects will help develop a more resilient energy infrastructure, potentially reducing the need for natural gas storage facilities, along with reducing emissions of criteria and toxic emissions while providing economic benefits.

Lastly, methane is a powerful greenhouse gas that persists in the atmosphere for approximately 12 years before reacting to produce ozone. The last three IPCC reports have increasingly highlighted the importance of methane as a heat trapping gas in the atmosphere (Attachment C). When determining the GHG mitigation needs, California should include the latest science on methane that shows the importance of using a 20 year global warming potential (GWP). Using the more appropriate 20 year GWP, the preliminary GHG mitigation need is 7.8 million MT CO₂eq compared to 2.4 million MT CO₂eq using the 100 year GWP. Additionally, the slow reaction of methane in the atmosphere increases background levels of ozone, making it more

March 17, 2016

difficult for the Basin to achieve the federal ozone standards. Tropospheric ozone itself is a greenhouse gas and the IPCC considers ozone criteria pollutant precursors (NO_x and VOCs) to be short lived climate forcers (Attachment C). The State, in final development of their short lived climate pollutant strategy and in this mitigation plan should recognize ozone as a climate forcer to further maximize the climate and health benefits of emission reduction programs.

Thank you for your attention to the importance of prioritizing the Aliso Canyon Climate Mitigation Program within the Porter Ranch community and the Basin.

Sincerely,

A handwritten signature in blue ink, reading "W.A. Burke".

Dr. William A. Burke
Chairman, SCAQMD

Enclosures:

- Attachment A: SCAQMD Board Resolution No. 16-1 and Letter to Mary Nichols
- Attachment B: Examples of Select GHG Mitigation Projects
- Attachment C: Methane Global Warming Potentials and Short Lived Climate Forcers

Attachment A: SCAQMD Board Resolution No. 16-1 and Letter to Mary Nichols



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Members of the Governing Board:

January 21, 2016

Chairman
Dr. William A. Burke
Speaker of the Assembly Appointee

Vice Chairman
Ben Benoit
Mayor, Wildomar
Cities of Riverside County

Michael D. Antonovich
Supervisor, Fifth District
County of Los Angeles

John J. Benoit
Supervisor, Fourth District
County of Riverside

Joe Buscaino
Councilmember, 15th District
City of Los Angeles Representative

Michael A. Cacciotti
Councilmember, South Pasadena
Cities of Los Angeles County/
Eastern Region

Joseph K. Lyou, Ph.D.
Governor's Appointee

Larry McCallon
Mayor, Highland
Cities of San Bernardino County

Judith Mitchell
Councilmember, Rolling Hills Estates
Cities of Los Angeles County/
Western Region

Shawn Nelson
Supervisor, Fourth District
County of Orange

Dr. Clark E. Parker, Sr.
Senate Rules Committee Appointee

Dwight Robinson
Councilmember, Lake Forest
Cities of Orange County

Janice Rutherford
Supervisor, Second District
County of San Bernardino

The Honorable Mary D. Nichols, Chair
California Air Resources Board
1001 "T" Street
P.O. Box 2815
Sacramento, CA 95812

Re: Governor's Executive Order of January 6, 2016, directing the
Air Resources Board to Develop a Program to Mitigate the
Greenhouse Gas Effects of the Southern California Gas
Methane Leak Affecting the Porter Ranch Community

Dear Chair Nichols:

The Governing Board of the South Coast Air Quality Management District is very concerned about the impacts of the Aliso Canyon Southern California Gas Company methane leak on the residents of Porter Ranch. The District has been working closely with the state agencies that are helping to address this problem. We appreciate that the Governor has declared a State of Emergency regarding this situation and has directed the Air Resources Board to develop a program, funded by Southern California Gas Company, to fully mitigate the greenhouse gas effects of the methane leak by March 31, 2016.

At our January 8 Governing Board meeting, Board Member Supervisor Michael D. Antonovich introduced a motion to adopt the enclosed resolution, which was approved by all board members present. As stated in the Resolution, the Governing Board of the South Coast Air Quality Management District hereby requests that funds for the greenhouse-gas mitigation program be dedicated, to the maximum extent feasible, to mitigation projects for the benefit of Porter Ranch, which is the Southern California community directly impacted by the air emissions due to the gas leak, and if projects are not feasible in Porter Ranch, to be dedicated to projects in Southern California.

Attachment A continued: SCAQMD Board Resolution No. 16-1 and Letter to Mary Nichols

Thank you for your attention to this Resolution, which is also being transmitted to Governor Brown.

Sincerely,

A handwritten signature in dark ink, appearing to read "W A Burke".

Dr. William A. Burke, Ed.D.
Chairman, SCAQMD Governing Board

Enc: Resolution #16-1

cc: The Honorable Edmund G. Brown, Jr., Governor

RESOLUTION NO. 16-1

A resolution of the Governing Board of the South Coast Air Quality Management District to urge that Governor Edmund G. Brown, Jr. request that funds obtained from the Southern California Gas Company for a greenhouse-gas program to mitigate methane emissions be spent on measures to benefit the Porter Ranch community adversely impacted by those emissions, and the Southern California region to the extent that it is infeasible to conduct projects in Porter Ranch.

WHEREAS on October 23, 2015, a natural gas leak was discovered at a well within the Aliso Canyon Natural Gas Storage Facility in Los Angeles County near Porter Ranch, and Southern California Gas Company's attempts to stop the leak have failed; and

WHEREAS major amounts of methane, a powerful greenhouse gas, have been emitted into the atmosphere; and

WHEREAS on January 6, 2016, Governor Brown issued a proclamation that declared the situation an emergency and directed various State agencies to take further action to protect public health and safety, ensure accountability and strengthen oversight of gas storage facilities; and

WHEREAS, the South Coast Air Quality Management District has been working closely with the agencies identified in the Governor's proclamation to ensure a consistent approach to protecting public health and safety and the environment; and

WHEREAS, the South Coast Air Quality Management District is seeking an Order for Abatement from its Hearing Board to, among other things, impose enhanced monitoring requirements on the Southern California Gas Company at the Aliso Canyon Natural Gas Storage Facility, require that the Southern California Gas Company fund a health study to determine the long term health effects, if any, imposed on the Porter Ranch community due to the exposure to methane and other air emissions; and

WHEREAS, the Governor's proclamation directs the California Air Resources Board, in consultation with other state agencies, to develop a program to fully mitigate the greenhouse-gas effects of the leak's emissions of methane by March 31, 2016, and provides that the mitigation program be funded by the Southern California Gas Company and be limited to projects in California;

NOW, THEREFORE, BE IT RESOLVED that the Governing Board of the South Coast Air Quality Management District does hereby approve this resolution, which is to be submitted to Governor Brown, requesting that funds obtained from the Southern California Gas Company for the greenhouse-gas mitigation program be dedicated, to the maximum extent feasible, to mitigation projects for the benefit of Porter Ranch, the Southern California community directly impacted by the air emissions due to the gas leak, and if projects are not feasible in Porter Ranch, to be dedicated to projects in Southern California.

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Cacciotti, Lyou, Mitchell, Nelson, Parker, Pulido, and Yates.

NOES: None.

ABSENT: Buscaino.

DATE: 1-8-2016


Sandra McDaniel, Clerk of the Board

Attachment B: Examples of Select GHG Mitigation Projects

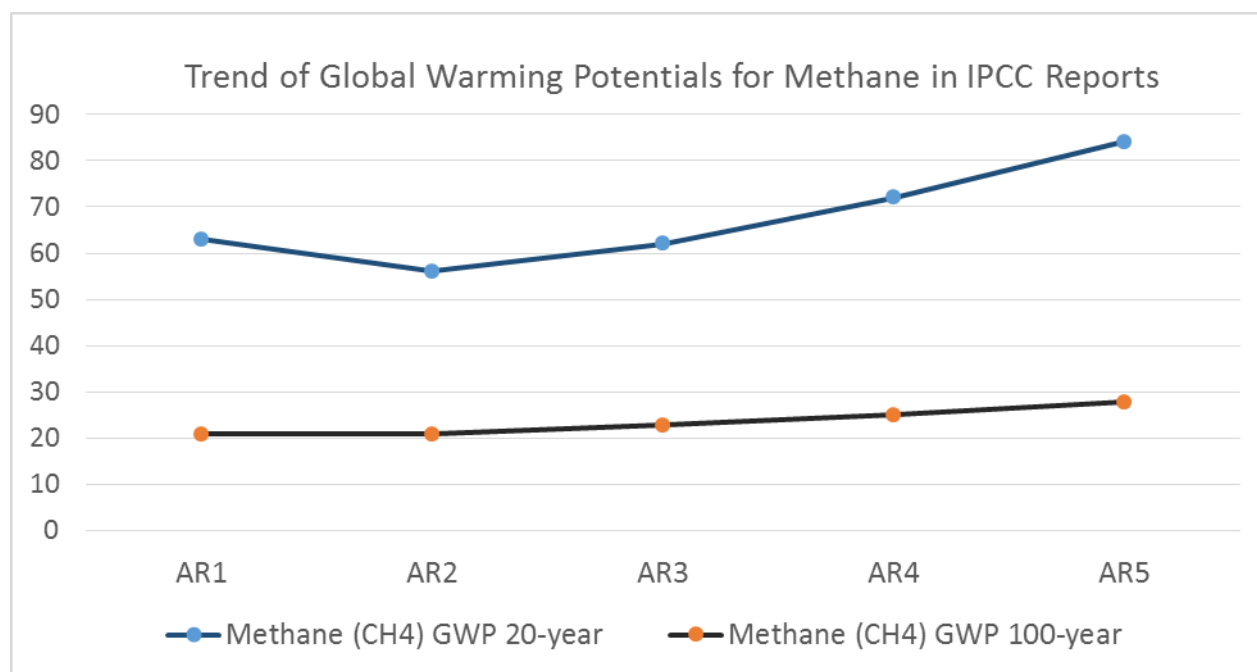
| Mitigation Program | GHGs reduced | Criteria and Toxic Pollutants Reduced |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Schools Renewable Generation, Solar Thermal, and Workplace Charging (Porter Ranch/Basinwide) | CO ₂ , Methane, Black Carbon, Tropospheric Ozone (precursors) | NO _x , Particulates |
| Electric School Bus Replacements (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , Particulates, Diesel Exhaust |
| Biogas Production from Waste Diversion, Landfills, and Other Waste Facilities (Basin) | CO ₂ , Methane, Black Carbon, N ₂ O, Tropospheric Ozone (precursors) | NH ₃ , VOCs, Particulates, Diesel Exhaust |
| Commercial Building Energy Efficiency, Renewable Energy, and Solar Thermal (Porter Ranch/Basinwide) | CO ₂ , Methane, Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Residential Weatherization, Improved Appliance Efficiency, Renewable Energy, and Solar Thermal (Porter Ranch/Basinwide) | CO ₂ , Methane, Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Zero-Emission Urban Bus Replacements (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , Particulates, Diesel Exhaust |
| Enhanced Fleet Modernization Program (EFMP) Plus Up for (Disadvantaged Communities around Porter Ranch) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Residential/Commercial Electric and Solar Thermal Space/Water Heating (Porter Ranch/Basinwide) | CO ₂ , Methane, Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates |
| Residential/Commercial Electric Landscape Equipment (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Offroad Industrial/Commercial Equipment (Porter Ranch/ Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |

Attachment B Continued: Examples of Select GHG Mitigation Projects

| | | |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------|
| Class 6 Truck Alternative Fuel/Hybrid Powertrains (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Electric Storage/Smart Grid (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Fireplace/Woodstove Retrofits (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates |
| Offroad Tier 4 Construction Equipment (Basin) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |
| Tier 4 Emission Standard Non-Road Portable Engines (Porter Ranch/Basinwide) | CO ₂ , Black Carbon, Tropospheric Ozone (precursors) | NO _x , VOCs, Particulates, Diesel Exhaust |

Attachment C: Methane Global Warming Potentials and Short Lived Climate Forcers

Each subsequent IPCC report has increased the importance of methane as a climate forcer and adjusted the methane global warming potentials (GWP). Additionally, the global warming potential of 20 years should be used for methane since its atmospheric lifetime is only 12 years. Accounting for warming from a gas 88 years past its destruction in the atmosphere does not account for the strong near-term climate impacts. The GWPs for methane include an indirect component from the warming resulting from the production of background ozone.



Attachment C (continued): Methane Global Warming Potentials and Short Lived Climate Forcers

The increase in background ozone levels from both increased methane and criteria pollutants results in tropospheric ozone being one of the strongest climate forcers as shown below.

