



PPG Industries

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Clerk of the Board
Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Re: Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

Dear Members of the Air Resources Board:

PPG Industries, Inc. (PPG) is pleased to provide you with comments regarding the proposed regulations to require mandatory reporting of greenhouse gas (GHG) emissions for California facilities. PPG is a multinational company that manufactures flat and fiberglass products, industrial and specialty chemicals, and architectural, aerospace and automotive paints and coatings at facilities in 24 countries around the world. PPG operates a float glass facility in Fresno, California that would be covered by the GHG reporting regulations proposed by the California Air Resources Board (CARB) staff.

PPG's comments on the proposed GHG reporting regulations are focused on four issues, as follows:

- The proposed emission factors and emission calculation methods.
- The applicability of Cogeneration Facility reporting requirements to waste heat recovery operations at General Stationary Combustion Facilities.
- The scope of information required regarding related entities that are not subject to reporting under the regulations.
- The reporting threshold for General Stationary Combustion Facilities.

Proposed Emissions Factors and Calculation Methods

PPG, like many operators that will be subject to the CARB regulations, has numerous facilities outside California that are or will be subject to GHG reporting requirements adopted by other states and countries. Therefore, it is of paramount importance to PPG and other similarly situated companies that the emissions calculation and reporting protocols adopted by these various jurisdictions be consistent to the maximum extent possible. Otherwise, establishing the internal information systems and procedures necessary for compliance across the enterprise becomes unmanageable.

In the proposed GHG reporting rule, CARB staff has specified emission factors that do not match the AP-42 fuel-specific emission factors used in PPG's (and, we suspect, many other companies') current inventories of facility emissions in the United States. Nor do they correspond to the emission factors specified in EPA's Climate Leaders program for tracking GHGs, or those specified by the Energy Information Administration (EIA). Thus, PPG will have to modify the emission model within our company database to comply with the CARB GHG reporting rule, if it is adopted as proposed.

The regulatory burden of doing that for one facility is not overwhelming, but if other jurisdictions were to follow suit and adopt their own sets of emission factors, PPG and other large, multi-state and multinational companies would be faced with the prospect of calculating GHGs for similar facilities using different emission factors, depending on the jurisdiction in which the facilities were located. The inconsistent data on GHG emissions that will result from such an approach will not only present significant challenges to compliance managers at the enterprise level, but also will present significant challenges to regulators attempting to address climate change issues in an integrated manner around the globe.

The proposed emission factors and calculation methods specified in the CARB proposal are much more prescriptive than they need to be. PPG appreciates that the CARB staff developed "detailed and well-defined" factors in an attempt to "help ensure consistency and accuracy in reporting." However, that consistency will stop at the California border, as other reporting protocols already adopted or under development are far less detailed and prescriptive (*e.g.*, those set forth the World Resources Institute (WRI) protocol). And the level of detail in the proposed CARB procedures will provide little, if any, improvement in the accuracy of GHG emission estimates over other methods used in other jurisdictions.

AB 32 clearly favored efforts to promote consistency among international, federal and state GHG emission reporting programs and to streamline reporting requirements on GHG emission sources (*see* Health & Safety Code Section 38530(c)(2)). Therefore, PPG recommends that the CARB proposal be revised to provide more flexibility to operators in choosing the emission factors most appropriate to their operations from the various nationally and internationally recognized sources of published emission factors. Reporting facilities should be able to use emission factors from sources like AP-42, EIA, Climate Leaders, WRI, and The Climate Registry, as long as the factors are consistent with good engineering practice. In that way, companies will be able to adopt the most appropriate factors for their operations and apply them consistently across the enterprise, which will in turn result in a more consistent nationwide and worldwide inventory of GHG emissions.

With respect to CH₄ and N₂O, PPG supports the CARB staff's proposal to allow the development of source-specific emission factors. The fuel-specific emission factors for CH₄ and N₂O from stationary combustion are not accurate for many manufacturing

process exhaust gas streams where combustion dynamics, stoichiometry and temperature differ from the external combustion source data used to derive the factors in Table 6 of Appendix A. However, equivalent CO₂ from CH₄ and N₂O is a small fraction of total GHG emissions, and the requirement that such source-specific emission factors be verified annually through source testing presents an unjustified cost burden for the reporting facility and an unjustified administrative burden for the CARB staff. Operators wishing to provide more accurate inventories of their GHG emissions by developing source-specific emission factors for CH₄ and N₂O should not be discouraged from doing so by the significant additional expense of annual source testing. PPG recognizes the need to verify the accuracy of source-specific emission factors periodically, but recommends that the requirement for source testing to support source-specific emission factors for CH₄ and N₂O be reduced to a period no more frequent than every five years.

GHG Reporting for Industrial Waste Heat Recovery Systems

PPG believes that the definition of Cogeneration Facility in the proposed regulations would cover projects to recover waste heat from industrial operations for reuse within the facility. If large enough to meet the thresholds for operators of cogeneration facilities under Section 95101(b)(7), such waste heat recovery projects would expand an operator's GHG reporting requirements very substantially. Further, while the reporting requirements under Section 95112 may be appropriate for a power plant, the data and calculation methods are not applicable to many manufacturing operations where the fuels are consumed in the manufacturing process equipment and the process emissions pass through the waste heat recovery system.

PPG believes that requiring the operator of a General Stationary Combustion Facility to comply with the requirements of Section 95112 will discourage future implementation of waste heat recovery from manufacturing processes. The economics of a new waste heat recovery project are often marginal under standard methods for evaluating capital projects, so any additional cost or regulatory burden could kill a project that would otherwise conserve energy and reduce GHG emissions. PPG therefore recommends that new projects to recover waste heat from manufacturing processes at General Stationary Combustion Facilities be excluded from the definition of Cogeneration Facility under Section 95102(a)(42) and from the coverage of Section 95115(e).

Information on Related Entities Not Subject to GHG Reporting

Proposed Section 95104(a)(8) and (9) of the GHG reporting regulation would require reporting operators or their parent companies to provide CARB with "a list of all facilities and offices in California owned or operated by that parent company, including subsidiary facilities and offices not subject to the requirements" of the regulation, and the contact information for each, including physical addresses, e-mail addresses and telephone numbers. PPG believes that the scope of proposed Section 95104(a)(8) is overly broad and will not result in the collection of information that would be useful to support future program development, which is the stated intent of the CARB staff. For a large, diversified company such as PPG, the location and number of sales offices, small

manufacturing locations and retail stores can change frequently and such a list would be quickly obsolete. The effort necessary to compile a new list each year would not be justified as many of these facilities and offices have little or no CO2 footprint apart from energy use, which will be accounted for by reporting facilities in the utility sectors.

PPG recommends that the scope of Section 95104(a)(8) be narrowed to target the collection of information on related entities and/or facilities that may generate GHG emissions from their own operations, rather than from the purchase and use of energy for which GHG emission reporting is already performed by the utility sector. Offices and retail stores should be specifically exempted from the coverage of Section 95104(a)(8). Finally, ownership share in a specific facility is not pertinent to any aspect of the GHG emissions inventory, and the requirement to submit such information should be deleted from Section 95104(a)(8).

GHG Reporting Threshold

PPG is aware that CARB staff carefully considered the GHG emissions threshold at which General Stationary Combustion Facilities should become subject to mandatory reporting. However, as noted previously in our comments on the need for consistency across jurisdictions, PPG believes that the threshold for such facilities should be set at the same level as in Canada and the European Union. The CARB staff report states at page 52 that the "25,000 MT threshold is also used in the European Union reporting program." However, that is erroneous. The reporting threshold for CO2e from general industrial sources in the European Union is 100 million kilograms per year, which is equal to 100,000 metric tons rather than the 25,000 metric ton threshold chosen by CARB staff.

PPG appreciates this opportunity to submit these comments on the proposed mandatory GHG reporting requirements for facilities in California.

Sincerely,



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