



December 15, 2010

**Filed Electronically**

Clerk of the Board

California Air Resources Board

1001 I Street

Sacramento, CA 95814

<http://www.arb.ca.gov/lispub/comm/bclist.php>

Re: Comments on CARB Item "capandtrade10": Proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols

Dear Sir or Madam:

Effective April 2010 all Saint-Gobain glass packaging businesses around the globe (including Saint-Gobain Containers, Inc. in the U.S.) became a single brand: Verallia.

On behalf of Verallia, this letter timely provides public comments on the California Air Resources Board's proposal for a cap on greenhouse gas ("GHG") emissions and market-based compliance mechanisms regulation, including compliance offset protocols. Verallia operates 13 glass container manufacturing facilities across the United States that employ over 4,500 employees and produce billions of glass containers per year for food, beverages, beer, spirits, and wine. Verallia operates a glass container facility in Madera, California, that will be subject to CARB's Cap and Trade Program for GHGs, and therefore is directly affected by this rulemaking. Verallia previously operated two other glass container facilities in California, one at Maywood (closed in 2004) and the other at El Monte (closed in 2006).

In fact, stating that Verallia's Madera facility is "directly affected by this rulemaking" understates the potential significance of CARB's proposed Cap and Trade Program because the program as set forth in the proposed regulations potentially threatens the plant's long-term ability to compete, particularly with the substantial capital investments which will be required at the plant between now and 2020. As a general principle, Verallia opposes a state or regional Cap and Trade program for addressing GHGs because a federal program (and eventually a global one) provides a more realistic approach for addressing climate change, which is clearly an international issue. That said, if the State of California proceeds to adopt a Cap and Trade program, such a program should be fair and not cause leakage. As explained in greater detail below, Verallia's container glass facility at Madera is already (1) well-controlled and efficient from an emissions standpoint (e.g., due to ongoing ozone and PM<sub>2.5</sub> nonattainment in the San Joaquin Valley) and (2) efficient from a process standpoint, due largely to the greater availability and use of high quality/uncontaminated recycled glass ("cullet") as a substitute for raw materials, which together leave far fewer options for further reducing GHG emissions.

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In addition, as CARB Staff previously documented, the container glass sector as a whole has a “high risk” of leakage due to its high energy intensity and trade exposure. Add in the cost-sensitivity of the business and the already high cost of manufacturing in California, and it becomes clear that the “protections” in the proposed Cap and Trade Program intended to mitigate this “high risk” for container glass manufacturing currently fall well short of providing the necessary relief.

This lack of adequate protection for the container glass industry in California, in addition to further eroding its ability to compete, will simply force the state’s wine industry to import (from other states and/or foreign countries) significant quantities of bottles by truck, rail, or ship, thereby further increasing the wine industry’s growing reliance on imports of glass bottles from China and other locations that are much less environmentally conscientious with respect to emissions such as GHG. Thus, the currently proposed Cap and Trade Program threatens the continuing existence of the container glass sector in California, especially for already efficient operations like the Madera facility, while simultaneously undermining the program goal of reducing net GHG emissions.

Before providing specific comments on the substance of CARB’s proposed Cap and Trade Program, Verallia cites two provisions of the California Global Warming Solutions Act of 2006 that speak directly to CARB’s mandate for adopting implementing regulations. First, at Cal. H&S Code § 38562(b)(1), CARB was instructed to adopt regulations that encourage and reward “early action to reduce greenhouse gas emissions.” To the extent that a business sector or particular facility within that sector already took steps to minimize GHG emissions, that source’s earlier efforts should mitigate the level of additional efficiency improvements required by the regulation. Otherwise, if additional emission reductions are imposed on all facilities without regard to their previous efforts, the more efficient sources operated by the earlier actors will be systematically eliminated because they have fewer prospective reductions to offer.

Verallia’s Madera facility employs a state-of-the-art combustion technology and, most importantly with respect to its ability to further reduce GHG emissions, utilizes high levels of cullet that result in one of the lowest GHG emission rates per ton of glass produced of any container glass manufacturing facility in the country. Also, the container glass industry in California has been using post-consumer cullet for many years pursuant to the 35% recycled content requirement set forth in the California Beverage Container Recycling and Litter Reduction Act, Cal. Pub. Res. Code § 14549(b). The industry should not be punished by limiting or reducing free allocation allowances, but should instead be rewarded through full allocation of free allowances for these early reduction actions.

Second, at Cal. H&S Code § 38562(b)(8), CARB was instructed to “minimize leakage.” Verallia submits that before CARB can properly minimize leakage, it must first understand the risk of leakage posed by the regulation, something that may not become evident until several years after implementation of the Cap and Trade Program. While CARB could attempt to remedy insufficient efforts to minimize leakage *after* the initial three-year compliance period, pursuant to its obligation to perform program monitoring, the damage at that point will likely be irreversible if companies have already shut down their California facilities and surrendered their various air permits with the inevitable result that the GHG emissions are merely moved elsewhere ... a true “lose-lose” result. Thus, to properly protect against leakage, it is imperative that CARB move forward in a way that does not have the unintended consequences of closing California manufacturing plants, eliminating thousands of California jobs, and





reducing California's income and property tax bases, while at the same time causing a simple shift in GHG emissions because production has been moved to another jurisdiction with less stringent requirements.

### **Comments on CARB's Proposed Cap and Trade Program and Supporting Materials**

Verallia obviously appreciates the magnitude of the proposed Cap and Trade rulemaking, but also appreciates the efforts of CARB Staff to create a fair and viable program that will not needlessly adversely impact or destroy entire sectors of the California economy. In particular, Verallia appreciates the sector-specific outreach provided to the glass container sector, which is in addition to this general opportunity for comment on the broader Cap and Trade program. Based on both the sector-specific interaction to date as well as the general rulemaking soliciting public input, Verallia provides the following comments on: (1) the proposed regulations for implementing CARB's Cap and Trade program, which are set to appear at 17 CCR §§ 95800-96022; (2) the CARB Staff Report for this rulemaking, titled "Initial Statement of Reasons – Proposed Regulation to Implement the California Cap-and-Trade Program," which is available online (along with various appendices to the Staff Report and additional supporting materials) at <http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm> ("Staff Report"); and (3) CARB Staff's additional background materials supporting the rulemaking, which may not appear online, but include communications between CARB Staff and the container glass sector concerning specific issues such as the emissions efficiency benchmark ("EEB").

1. The container glass sector's "high risk" vulnerability to leakage requires additional protections in the proposed Cap and Trade Program to avoid making California facilities uncompetitive.
  - a. California's container glass sector is already more efficient in terms of limiting and controlling GHG emissions compared to facilities in other jurisdictions.

For a number of reasons, the container glass facilities located in California are already among the most efficient container glass manufacturing sources in the United States when it comes to minimizing the generation of GHG emissions. This is especially true for stationary sources like Verallia's container glass facility in Madera, which is located in the San Joaquin Valley and therefore situated in a nonattainment area for ozone and PM<sub>2.5</sub>. For example, Verallia's Madera facility already minimizes combustion and combustion-related emissions to limit the generation of NO<sub>x</sub>, an ozone and PM<sub>2.5</sub> precursor. Further, the container glass sector in California is more advanced from a process emissions standpoint than similar facilities in other states due to the additional cullet available. Such availability is a critical factor in GHG reduction, since there is currently no "bolt-on" technology to control GHG emissions. Cullet requires less heat to melt (resulting in lower combustion-related GHG emissions) and creates fewer process emissions when it is incorporated as a feed stock for glassmaking compared to using carbonate-containing raw materials such as limestone or soda ash. The greater supply of cullet in California is primarily due to the state's container deposit legislation, which is currently one of only ten such programs in the United States. As a result, Verallia's Madera facility uses more cullet than every other company facility in the United States except one, which is also located in a state with container deposit legislation. Thus, with California container glass facilities like Madera already controlling emissions in response to nonattainment designations and along with the high cullet usage, there are fewer options for the container glass sector to further reduce the combustion- and process-related GHG emissions compared to other industrial sectors.





- b. California's container glass facilities are generally more expensive to operate and therefore among the most susceptible to "leakage."

CARB Staff determined that the container glass sector is among the most susceptible to leakage for the reasons explained more fully in Appendix J (Allowance Allocation) and Appendix K (Leakage Analysis) to the Staff Report. In particular, container glass manufacturing was assigned to the group with the highest leakage risk among the industrial sectors regulated by CARB's proposed Cap and Trade program. *See, e.g.*, Appendix J to the Staff Report, Table J-3. Verallia agrees with CARB's conclusion that the container glass sector is more vulnerable to leakage than most industrial sectors regulated by the proposed Cap and Trade Program and therefore requires special protection.

Ironically, should the Cap and Trade Program force container glass facilities such as Verallia's Madera facility to shut down, the need for bottles by California's wine industry would likely result in importing those bottles from neighboring states or overseas. Under this scenario, the bottles necessary to support California's wine industry would cost more (given the additional costs of transportation) and generate additional GHG emissions (given the additional trucking and/or transoceanic distances). At the same point, GHG emissions eliminated in California would be increased at the foreign manufacturing facilities; thereby resulting in a net global increase of GHG emissions should the Madera facility be forced to close due to CARB's rulemaking. These environmental detriments would come in addition to the very real costs associated with eliminating hundreds of existing jobs and loss of local tax revenues associated with a plant closure. Thus, in addition to the high risk of leakage documented by CARB Staff for container glass facilities, there are additional negative consequences associated with the leakage given the fundamental need for bottles by the California wine industry.

- c. The proposed basis for allocating allowances provides inadequate protection for the container glass sector.

Although the proposed Cap and Trade Program provides some consideration for the container glass sector's high leakage risk, the protection provided is inadequate to the task and, without supplementation, will make it very difficult for container glass facilities to remain operating in California. Specifically, since the container glass sector is a product-output based sector, the amount of annual GHG allowances allocated to container glass facilities is determined using the formula set forth in § 95891 of the proposed rules. That allocation formula contains inputs based on (1) recent product output, (2) a GHG EEB (3) a sector "assistance factor," and (4) a cap "adjustment factor." While the proposed third input (i.e., the assistance factor) would provide a 1.00 multiplier (based on Table J-3 in Appendix J to the Staff Report) and therefore does not penalize the glass container sector, the second and third formula inputs *both* reduce the amount of allocated GHG allowances below what is needed to sustain operations. As a result, the proposal merely stops short of penalizing glass container facilities in one formula input while simultaneously penalizing the facilities using two other formula inputs that each ensures an additional shortfall of GHG allowances.

Verallia believes it necessary to provide additional protection for the container glass sector to avoid eliminating the sector (and its jobs and tax revenues) from the California economy. Potential avenues for providing such relief include, but are not limited to, adopting each of the following measures to protect the container glass industry from its high risk of leakage:



- Additional protection is necessary to protect the capacity of regulated sources rather than simply focusing on their actual emissions. Under the federal New Source Review program as well as California's State Implementation Plan, the analysis of a source's historical production is evaluated by accounting for the level of production that the source was capable of accommodating. *See, e.g.,* 40 CFR § 52.21(b)(41)(ii)(c) (the "demand growth exclusion"). Thus, if a customer seeks a lighter bottle that requires less material, which thereby reduces the container glass furnace's glass pull rate, the source is not punished for making that lighter and more environmentally friendly product. By contrast, without a similar provision in the proposed Cap and Trade Program, a purely output-based calculation of GHG allowances would create a perverse disincentive for every manufacturer to avoid producing lighter products because, by doing so, that company would effectively forfeit part of its ability to return to a heavier product afterward.
- Ensuring that container glass facilities with production stoppages (e.g., due to a cold repair) are not penalized using the "recent output" formula input. CARB has attempted to address this potential unfairness in the definition of "Output<sub>a,t</sub>," which states: "If three years of data are unavailable the Executive Officer may employ a shorter time period to calculate the annual average." CARB should clarify, however, that periods of suspended operation, including the diminished production levels preceding and following such suspensions, will not reduce the allocation of GHG allowances in following years as production returns to meet market demands.
- Avoiding additional and artificial reductions in the number of GHG allowances through the GHG benchmarking process. For example, without elaboration, Appendix J to the Staff Report states: "Staff's current thinking is that the targeted level of stringency would be created by evaluating each industrial sector's emissions intensity during a historical base period and targeting the benchmark to allocate 90% of this level per unit product." This reasoning appears to make no distinction between sectors with low and high risks of leakage and thus could create an additional 10% shortfall in allowances for the "high risk" glass container sector, which is already highly efficient.
- Specifying that the container glass sector's cap adjustment factor, "C<sub>1,t</sub>," should remain constant at "1.0" until at least 2020. The current cap erosion would require a 15% reduction in allowances for the glass container sector by 2020, despite the fact that there is no means of achieving such reduction. Even reducing glass production, the surest way to reduce net GHG emissions, will fall short of providing a sustainable reduction given the output-based allocation formula in the proposed rule that would merely result in fewer allowances going forward. Verallia strongly believes that high leakage sectors should not be subject to the cap adjustment factor. At a minimum, the cap adjustment factor for container glass should not be any lower than that proposed for the cement manufacturing industry in § 95891, "Table 9-2: Cap Adjustment Factors for Assistance to Industry." The container glass sector, like cement manufacturing, is a high risk sector for leakage and has the same types of GHG emissions as the cement industry, e.g., unavoidable process emissions due to the use of necessary product ingredients such as limestone.
- Establishing actual annual production in the compliance year as the basis for allowance allocation rather than looking back three years. The three-year look-back has the effect of restricting increased output to meet market demand from wineries for bottles at a time when recovery from





the current national economic crisis is still on the horizon. Without a forward-looking methodology for allocating allowances to the glass container sector, the effect will be higher costs on the wine industry and other food and beverage industries which rely on California-produced glass containers and relocation of jobs to out-of-state glass producers.

- Providing a discount for purchases of GHG allowances from the “Allowance Price Containment Reserve,” which could extend to all sources identified in the “high risk” for leakage category.
- Eliminating the 8% cap on offsets, which will encourage the development of GHG-reducing measures and provide additional flexibility for sources to address their GHG emissions.

Without relief such as that described above, the proposed Cap and Trade Program could drive out the state’s container glass facilities without a corresponding reduction in GHG emissions due to leakage.

2. Given the number of unresolved issues related to setting an EEB in the container glass sector, CARB Staff should continue to work with sector representatives to finalize an appropriate sector EEB by June 2011.

Despite the ongoing efforts to develop an EEB for the container glass sector by representatives from the sector and CARB Staff, Verallia believes that it is premature to establish an EEB methodology or value at the upcoming CARB meeting on December 16-17, 2010. In particular, the sector-specific methodology for establishing an EEB for container glass facilities remains unsettled due to a number of important issues still under discussion. On the other hand, container glass sector facilities, like all businesses, will need time to review the consequences of the finalized Cap and Trade Program, including the applicable EEB, and formulate a compliance strategy before implementation occurs. Thus, while setting an EEB is premature today, Verallia recommends a June 2011 deadline for setting the EEB to allow adequate preparation for program compliance strategies.

Among the EEB issues that remain unresolved, Verallia notes the following:

- a. Establishing an EEB for the container glass manufacturing sector should employ nationwide data, not California-only data.

Through a combination of California-specific sector surveys and more recent exchanges of national data and information, CARB Staff collected a variety of nationwide and state-specific data to determine the relative efficiencies of furnaces and facilities within the container glass sector. Although Verallia has yet to review a final proposal by CARB Staff to adopt either a national or state-specific approach to establishing the sector EEB, Verallia believes that a national approach is most appropriate. To begin with, deriving an EEB from a small sample of facilities, all located in one state, can result in an abnormally low benchmark. For example, sector facilities located in other states, including those located elsewhere within the Western Climate Initiative (“WCI”), will reflect the varying conditions of those local economies and regulatory programs. By contrast, a survey of national information provides a larger and more representative set of sector data that is not tied to the local peculiarities of any single region. Additionally, as noted above, California container glass facilities are already more efficient and better-controlled, primarily because of the consistent availability of substantial quantities of high quality/uncontaminated cullet compared to most other jurisdictions, including other members of the WCI.





As previously noted, cullet availability in the U.S. is linked very closely to container deposit legislation, with well over half of all suitable cullet coming from the ten states that have such laws. Of the WCI Partner states, only California and Oregon have such legislation in place.

Thus, for a variety of reasons, establishing the EEB for container glass facilities should employ the larger set of nationwide data for the sector rather than focusing on a few facilities based in California.

- b. CARB and CARB Staff should not expand the process for establishing an EEB to depend on electrical consumption data.

Despite federal and state programs (including this proposed Cap and Trade Program) that are clearly based on *direct* GHG emissions, Verallia is aware of recent discussions between container glass sector representatives and CARB Staff concerning the potential inclusion of electrical consumption when calculating an EEB for this sector. Verallia believes that attempting to assess electrical consumption in setting the EEB for container glass facilities, and by extension in calculating a facility-specific allocation of allowances, will unnecessarily complicate the EEB-setting process while providing questionable benefits, if any. For example:

- The annual GHG reporting required by the existing federal rule, which is the model for CARB's proposed GHG reporting program, does not count GHG emissions due to electrical consumption by a customer. Rather, the federal and state programs deal with GHG emissions caused by electrical generation at the point of generation. Thus, in addition to the practical and policy reasons for doing so (which are described further below), ensuring consistency with the existing federal and state GHG reporting programs provides an important reason for considering direct facility emissions for EEBs, but not electrical purchases from offsite.
- From a practical standpoint, GHG emissions due to electrical consumption are already addressed at the point of generation (or importation). As a result, it is difficult to justify double-counting those same GHG emissions, especially when the electrical generators will receive allowances and electricity prices will continue to vary over time.
- Also, the consideration of electrical consumption by end-users in establishing an EEB would require a series of related and complicated decisions about whether to count (a) only that electricity used as a substitute for heat in the glass melting process, (b) all electricity utilized at a facility, or (c) all electricity utilized at a facility and certain off-facility uses, such as when electricity is consumed by third parties to providing fuels or ingredients to the process (such as purchased oxygen).
- Differentiating between intermediate- and end-users of electricity would add another layer of complexity and uncertainty to the EEB process, especially when considering the different sectors implicated in this decision-making.
- The proposed Cap and Trade Program provides a formula for calculating and allocating GHG allowances at § 95891(b) that provides a sector-specific EEB. By contrast, a different formula with a new and facility-specific "R" factor appears in the "Glass Manufacturers Survey Summary"





prepared by CARB staff. Verallia supports the formula that appears in the proposed rule, not the inconsistent formula appearing in the Survey Summary, and urges CARB staff to adopt a sector-wide EEB rather than a facility-specific one.

- The EEB is intended as a static metric for determining direct GHG emissions, but incorporating electrical use into the benchmark would “freeze” the effect of electrical consumption rather than leaving it free to improve.
- Updating benchmark data will become more difficult if various forms of electrical consumption become incorporated because current federal and state reporting requirements do not include all of such data in the annual reports, e.g., revisions would become necessary to properly consider what elements of electrical consumption would be reported by individual sectors in the future.
- Reducing allowance allocations based on electrical consumption would penalize development of on-site electrical generation technologies such as solar or wind
- Finally, Verallia questions why CARB Staff would decide to incorporate indirect GHG emissions due to electrical consumption into the EEB process for only certain industrial sectors. If electrical consumption were considered for the glass manufacturing sector, it would unfairly mark a departure from the reporting and allowance allocation methods applied to other similar industrial sectors, e.g., cement manufacturing. In fact, were electrical consumption added to the EEB process for container glass, such an expansion would be necessary for all industrial sectors subject to the proposed Cap and Trade program to avoid discriminating against certain sectors of the California economy.

Taken together, trying to account for electrical consumption at container glass facilities in the EEB-setting process would complicate the assessment of relative emissions efficiency without creating a better basis for allocating allowances to individual glass manufacturing operations.

- c. There is a need for adequate review of any sector-specific EEB-setting methodology proposed by CARB Staff.

Given the obvious importance and potential complexity of the glass container benchmark, it is crucial that sector representatives have an adequate opportunity for review and comment on a final proposal. As discussed above, several conceptual decisions are necessary before a benchmarking methodology can be developed, let alone scrutinized and understood. In addition, CARB Staff will need to answer questions by sector representatives about potential issues with the final proposal. As an example, although benchmarking calculations conducted by CARB Staff should be reproducible by industry, benchmark calculations shared to date have not matched up with calculations by sector representatives when properly accounting for the differences between metric tons and short tons. Absent additional discussions and review, it is premature to establish an EEB for the glass container sector.

Taken together, the concerns (outlined above) with the EEB-setting process illustrate the importance of completing a deliberate and cooperative process for developing a fair and transparent benchmark rather than rushing to conclude the process already underway. Verallia therefore urges that CARB not establish a numerical EEB or EEB-setting methodology for the glass manufacturing sector at





its December meeting, but nevertheless endeavor to complete the process by June 2011 so as to provide adequate time for sector businesses to plan and comply.

On behalf of Verallia, thank you for the opportunity to comment on this rulemaking activity.

Sincerely,

A handwritten signature in black ink, appearing to read "SBS", followed by a horizontal line.

Steven B. Smith  
V.P. Environmental and Regulatory Affairs

c: Bruce Tuter, CARB  
Kevin Kennedy, CARB  
Stephen A. Segebarth  
Ty Sibbitt