

December 15, 2010

California Air Resources Board Clerk of the Board 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

## RE: GANA Comments to Draft Cap and Trade Regulations California Air Resources Board – Public Hearing December 16, 2010

#### **SUMMARY**

GANA supports the inclusion of the following provisions in the draft cap and trade program:

- 1. Recognition of the glass industry as a high leakage risk and a recipient of free allowances to help reduce the possibility of leakage from the glass industry;
- 2. Reliance upon multi-year output averaging for allocations;
- 3. Retention of the assistance factor at 100% for the flat glass industry; and
- 4. Establishment of separate CO<sub>2</sub> equivalent emission intensity benchmarks for container, flat and fiber glass manufacturing sectors.

GANA proposes the following revisions to the cap and trade program as drafted:

- 1. Establishment of the flat glass industry average CO<sub>2</sub> equivalent emission intensity using data from all flat glass sites a nationwide basis; and
- 2. Lengthening the output based averaging period to five years with a provisions to drop the high and low years in order to account for furnace maintenance cycles in the flat glass industry.

### DISCUSSION

The Glass Association of North America (GANA) appreciates this additional opportunity to participate in this proceeding and comment on CARB's draft regulations for a cap-and-trade program in California. GANA also appreciates CARB's considerations of many of the recommendations from the comments it submitted in response to the May 17<sup>th</sup> workshop regarding the proposed allocation methods. GANA is the leading trade association serving flat glass manufacturers, fabricators and glazing contractors in North America. Its flat glass manufacturing members operate collectively 19 float glass plants throughout the United States, three of which are located in California. The flat glass industry in California is highly energy intensive and trade exposed and would therefore be greatly impacted by any GHG cap-and-trade program in California.

GANA recognizes and conditionally endorses CARB's current proposals to lessen the impact on manufacturing by offering allocations to vulnerable industries as a way of reducing the immediate impact of the cap-and-trade program in California. GANA supports this approach for the flat glass industry due to a) its energy intensity, b) its general inability to pass costs along to consumers, and c) its inability to respond quickly to any significant step change requirements to lower  $CO_2$  emissions from its glass melting furnaces. GANA also notes that some flat glass products are integral to the successful adaptation of "green" technologies like solar energy that form an integral part of the overall GHG reduction goals of AB32.

In response to the cap and trade program requirements presented by CARB in the draft regulations issued on October 28, 2010, GANA offers the following comments for the Board's consideration.

### **Benchmark Emissions Intensity**

GANA strongly urges CARB to include all applicable float glass furnaces operating nationwide in the establishment of the emission intensity benchmark for the flat glass sector, as opposed to restricting such scope to only California or the WCI region as the draft regulations currently contemplate. GANA stresses that is important to ensure that the benchmark established for purposes of applying CARB's cap-and-trade regulations is fully representative of actual industry operations over the course of a furnace campaign (the operational time between cold repairs/rebricking activities) which can last anywhere between 10 to 20 years.

During the course of a flat glass furnace campaign, many factors or variables will affect the GHG emissions intensity of the flat glass operation, including the age of the furnace (energy efficiency decreases over the course of a campaign as the furnace wears), the types of products made (different energy requirements for tints versus clear glass), the types of burner technologies employed (i.e., oxygen boost, oxygen enrichment, electric boost, etc.), the types of downstream value added processes employed (i.e., on-line coatings, etc.), and repair periods such as cold repairs and hot holds (during hot holds, no product is being produced but energy is still used to keep the glass in a molten state). Based on all of these factors or variables, a benchmark developed on the basis of just the three float glass operations in California would not be representative of standard industry operations.

The consideration of the GHG emissions of all flat glass furnaces nationwide in the development of the benchmark will help ensure that the data from different points in the campaign cycle, different tint products and different furnace and downstream technologies are appropriately included in the industry average and that the data adequately, fully, and fairly represent the range of operations that can exist in California. For example, about 30% of the flat glass operations in California utilize an oxygen fired furnace design. This is much higher than the percentage of oxygen fueled fired furnaces employed in the flat glass sector nationwide. The California average would suggest that this furnace technology is much more widely employed in the flat glass sector than it actually is and therefore would represent an average that is significantly and unfairly skewed towards one type of furnace design.

In order to develop a nationwide average of flat glass industry operations, GANA suggests that CARB utilize the data that industry will submit in 2011 for its 2010 emissions as required by the USEPA federally mandated GHG reporting program. The data that will be submitted as part of the federal mandate will be verifiable, cover all or almost all flat glass furnaces nationwide, and include production data to an extent that it can be used to establish an accurate and representative industry average emission intensity. This approach will ensure that sites in California are not penalized for uncontrollable affects like furnace age and timing of hot holds and cold repairs.

In summary, GANA supports the establishment of the benchmark at 90% of the industry average, but recommends that the industry average, in order to representative and accurately reflective of operations in California, include all flat glass furnace sites in the U.S. instead of just the three located in California.

# **Output Factor for Flat Glass**

GANA recognizes and endorses CARB's decision to increase the product output based averaging period upon which the free allocation calculation is based to three years instead of the previously proposed one year time period. However, using the average of three years output to calculate projected allocations will still be problematic and materially inadequate if that three year time period includes a year in which a hot repair, hot hold or furnace cold tank repair (CTR) takes place.

During a hot hold (idling conditions), no product is being produced but the furnace is kept hot. On average, a typical regenerative furnace uses 50% of the energy needed to operate the furnace at full production capacity in order to maintain the heat in the furnace during a hot hold with no production. This amount of energy represents the minimum amount of heat needed to run the furnace and is independent of output. Hot holds are generally done for emergency repairs of the furnace and are not done very often. They can generally last up to a couple of months so they can affect the allocations given for a site in the following year when production is full under the currently proposed allocation method. Similarly for CTRs, there are periods of time in which fuel is being combusted for heat-up and initial raw material charge, but no product is being produced. Under the current draft regulations, these activities would result in under allocation for the following year during normal production.

Hot holds and cold repairs are standard maintenance activities required within the flat glass industry and thus do not necessarily represent or signal an intent to cease operations. Under these conditions, in order to avoid the effects of leakage, it will be necessary to retain allocations for use upon start-up to normal production. In order to account for this standard industry maintenance practice in a manner that reduces the likelihood of leakage while achieving the goals of the cap and trade program, GANA urges CARB in the final regulations to calculate the output factor used in the product-based allocation formula for the glass sector from the production in years t-2, t-3, t-4, t-5 and t-6, dropping the year representing the lowest production and the year representing the highest production and the arithmetically averaging the remaining three years to arrive at the output factor in the allocation formula. This approach ensures that flat glass sites will be adequately covered despite the potential distortion of the necessary maintenance periods. Additionally, this approach will also help protect the industry in the beginning few years of the program against the lingering impacts from the severe economic downturn by allowing the year that was most heavily impacted by it to be dropped from the average.

GANA points out that this averaging method, in which the high and low years of the five are dropped, is the basis for the flat glass industry allocations in the European Union and has been found to be a reasonable and fair approach for that program for the same reasons as outlined above for the flat glass sector in the U.S. Additionally, GANA points out that the data required for this approach are limited to glass draw going back to 2006 and that these data are very likely available to CARB through established air regulatory reporting programs.

In summary, GANA appreciates the staff's consideration for the longer output averaging period currently in the draft regulation but in order to further protect against leakage within the glass industry, GANA urges a further refinement of the method: using a five-year look-back period with a provision to factor out years impacted by heatup periods and hot holds.

Finally, if CARB determines upon evaluation that none of the data available to it through the federal mandatory GHG reporting rule or other existing reporting programs is adequate to support the above proposals, then GANA requests a meeting with CARB to discuss other methods by which existing information may be supplemented or made available through mechanisms that can ensure the confidentiality of individual company information.

If you have any questions, please contact me at (785) 271-0208 or byanek@glasswebsite.com.

Sincerely,

**Bill Yanek** 

GANA Executive Vice President