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The Voice and Advocate for the California Food Processing Industry since 1905

To: **The Honorable Mary Nichols, Chair**
California Air Resources Board

Fr: **California League of Food Processors**

Date: **September 19, 2016**

Re: **Comments Regarding the Proposed Amendments to Climate Change Regulations**

The California League of Food Processors (CLFP) appreciates the opportunity to provide comments on the proposed amendments to the cap-and-trade and mandatory reporting regulations. CLFP supports the efforts of the CARB and hopes these comments will aid CARB in forming fair and policy-oriented regulations regarding future GHG allowance allocations with the goal of minimizing the potential harm to the California economy and avoid simply shifting emissions to other jurisdictions.

It is important to note, that while the California Legislature has chosen to pursue a questionable increase in the state's goal regarding the reduction of GHG emissions without investigation or study as to the impacts on the state's economy, it is clear after ten years of operation, that no other states have made similar emissions reduction commitments nor have they joined the California's cap-and-trade program. Consequently, the decisions that CARB makes regarding post-2020 implementation of the state's goals embodied in Senate Bill 32 (Pavley) requiring CARB to ensure that the statewide GHG emissions are reduced to at least 40 percent below 1990 levels by 2030, are guaranteed to have a significant impact on the ability of firms in this state to compete for some time into the future.

Comments on Staff's Proposals Concerning Leakage Risk

In 2011 and 2012, Board Resolutions 11-32 and 12-33 directed staff to investigate potential improvements to industrial allowance allocation to better meet the Assembly Bill 32 (AB 32) objective to minimize emissions leakage to the extent feasible. In response, ARB commissioned three emissions leakage potential studies to inform the development of assistance factors (AFs) for allowance allocation to manufacturing sectors.

The allowance allocation method that CARB devised at the onset of the cap-and-trade program included emissions intensity and trade exposure metrics which resulted in the food processing sector being designated as "medium" leakage risk. CLFP voiced objections to this classification scheme from the onset for the following reasons:

1. This method was, and remains, a very crude estimation technique unsupported by studies or other data;
2. The risk levels used to specify emissions intensity and trade exposure were based on gross measures of competitiveness, and arbitrary judgements about what constitutes high risk.

When CARB approved, in Resolution 11-32, a food processing industry leakage study, it was with knowledge of these inadequacies present in the previous study as well as it not being representative of the food processing industry in California. The initial study looked at only two processing plants, a California cheese manufacturer and a Georgia-based poultry plant, completing ignoring the fruit and vegetable processing operations located in the state. The data collected by CARB failed to note that many of California's food processors are seasonal, but also failed to take into account boilers sizes, differences in processing methods, and the international competitive pressures of the world markets. And there was no relevant market demand analysis or data at all.

Simply put, the purpose of the study approved in Resolution 11-32 was to acquire the data necessary to determine an accurate assistance factor/leakage risk for the food processing industry as the current leakage risk factors were not scientifically supported.

Per Resolution 11-32:

> BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue to review information concerning the emissions intensity, trade exposure, and in-State competition of industries in California, and to recommend to the Board changes to the leakage risk determinations and allowance allocation approach, if needed, prior to the initial allocation of allowances for the first or second compliance period, as appropriate, for industries identified in Table 8-1 of the cap-and-trade regulation, including refineries and glass manufacturers.
>
> …
>
> BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a study to analyze the ability of the agricultural industry, <u>including food processors, to pass on regulatory costs to consumers, given domestic and international competition and continually fluctuating global markets.</u> The Executive Officer shall identify and propose regulatory amendments, as appropriate. (Page 11) (emphasis added)

Any analysis of leakages without consideration of markets is no analysis at all. This need to understand our markets was intrinsic to the Resolution approved by the CARB Board in 2011. It is well recognized that very inelastic (price unresponsive) demand means that a large portion of the production cost increases can be passed downstream to consumers. However, in industries where California competes in international markets, such as dairy or tomatoes, demand facing California producers and processors is undoubtedly very elastic, meaning higher costs cannot be passed on and leakages will be very significant.

Yet, in the second paragraph of Appendix E, Staff Report: Initial Statement of Reasons (August 2. 2016) staff is seemingly attempting to alter the clear stated purpose for approving the leakage study:

"In commissioning the three studies, staff had intended to develop a revised methodology by which revised AFs, not including transition assistance, could be calculated and applied in the third compliance period (2018-2020). These revised AFs would be at sector-specific levels necessary to minimize potential emissions leakage. After additional thought and discussion with stakeholders, staff decided to extend transition assistance through the third compliance period, at levels set in the 2013 regulatory amendments. Any revised AFs that may be proposed as part of 15-day comment period would be implemented starting in the fourth compliance period (post-2020)." (emphasis added)

What staff "intended" was never discussed with CLFP or any other food processing industry representative to CLFP's knowledge, at least in regards to the food processing study. The impetus for the food processing study was the lack of data available to support CARB's initial assignment of a medium leakage risk designation for the food processing industries and CLFP's firm belief that CARB erred in the initial analysis. The Hamilton et al study was designed to provide accurate industry data for use in determining the leakage risk for the sector (NAICS §311) under the current Cap-and-Trade regulation. The study was specifically aimed at determining leakage risk for these sectors in 3rd compliance period.

As such, it would be patently unfair to allow such to be used as justification for a major policy decision that unilaterally denies a new leakage designation for food processors in the 3rd compliance period. What staff recommends compounds the original error in its decision by extending the transition assistance through the 3rd compliance period at levels set in 2013 without regard to the clear language in Resolution 11-32 and in light of the findings and conclusions of the Hamilton et. al study.

Food Processing Sector Study

It is irrefutable that most food processors in California compete with companies in other states and countries. California tomato processors compete with operations located in four other states and at least 18 other countries. Cheese is produced in virtually every state, and in numerous countries around the world, as well. Due to this level of competition, and the fact that food is generally not a luxury item, margins in the food processing business tend to be small. As a result, modest shifts in cost can affect market share, and CLFP believes that the Hamilton study, being sector specific, demonstrates that point.

CLFP has reviewed the Hamilton et al study and believes that the research team did a good job of quantifying market transfer rates and production leakage. The results demonstrate that, without free emissions allocations, the impact of even modest carbon prices on the processing sector would be significant and supports a continued high level of assistance for food processors in the 3rd compliance period.

The Hamilton et. al. Study was finalized in July 2015, months ahead of both the Fowlie and RFF Studies. However, CARB withheld the release of the food processing study pending the completion of the other two studies. All three studies were finally released May 2016. During that ten-month interim period, CLFP made two requests of CARB staff to release the study, either publicly or to CLFP for internal distribution to participating companies. Both requests were rejected. In that ten months, CARB staff had ample opportunity to review and share its positions with the companies that participated in the study. Significant progress might have been made toward a more accurate leakage risk designation but for the delay in releasing the studies.

To date, CARB has yet to take a position regarding the Hamilton Study's conclusions as to high leakage risk for food processors. It should be noted that in light of the only sector specific study of the food processing industry's leakage risk, CARB has offer no factors to justify continuing the medium leakage risk in the 3rd compliance period. Nor has there been any position taken by CARB to refute the conclusions of the Hamilton et. al. Study. Lacking such, CLFP assumes that CARB has no general concerns with the findings.

As demonstrated by the Hamilton Study, even modest carbon prices can induce significant leakage to other states or countries. Having a reliable and stable supply of safe, high quality, and affordable food should be a public policy priority. That, along with the important economic impact that food processors have in communities across the state should be compelling reasons for CARB to designate food processors as high risk for leakage.

CLFP Recommendations
In conclusion CLFP makes the following recommendations:

Based on the Hamilton study, food processors should receive 100% allowance allocation or be designated a high leakage risk sector by CARB in the third compliance period.

Comments on Staff's Proposals Concerning Post-2020

Leakage Studies Performed by Resources For the Future and Fowlie et al.
As previously noted in our comments of June 10, 2016, CLFP wishes to aid and inform CARB policy regarding future GHG allowance allocations with the goal of minimizing the potential harm to the California economy, and food processors in particular, and to avoid simply shifting emissions to other jurisdictions.

CARB commissioned three leakage studies specifically to evaluate and potentially modify Assistance Factors (AF) for all industrial sectors. Two of these were broad-sector studies which analyzed both international emissions leakage (Fowlie Study) and domestic leakage (RFF Study). According to CARB staff these studies "complement each other to provide a *complete picture* of emissions leakage potential for most manufacturing sectors." (Page 4, Appendix E, Staff Report: Initial Statement of Reasons, Emissions Leakage Analysis, August 2, 2016). (emphasis added)

However, CARB staff's position regarding a "complete picture" does not reflect the position of most, if not all, the industrial sector subject to cap-and-trade compliance obligations. CLFP, along with other industrial sector participants, challenged some of the conclusions of both the Fowlie and RFF studies based on the initial presentation on May 18th. In addition, CLFP requested additional time to respond to the studies and asked that the studies undergo vetting or an independent review.

CLFP was disappointed by CARB's refusal to grant additional time to review both the International and Domestic studies, the very leakage studies which CARB staff makes clear will be basis for the new AF metrics for post-2020 implementation. This came on top of limiting the official comment period to just three weeks (June 10, 2016), given that these were two major leakage studies over two years in the making. No reason was ever given as to why additional time was not considered. To CLFP knowledge, no one challenged the good-faith efforts of either of the studies attempts to estimate emissions leakage. Stakeholders' remarks in the May 18th workshop did cite some specific conclusions in the studies, and in the authors' presentation, that seemed incongruous with common industry experience.

In an effort to emphasize the need for additional vetting, or at least to highlight the need for a peer review of the studies, CLFP engaged Armando Levy, a noted economist with The Brattle Group, to provide a professional input. CLFP will not reiterate the points made in its June 10, 2016 comments but only list the following conclusion from Dr. Levy:

1. **Clarity should be provided on how CARB will address the error structure in the new leakage metrics**.

    - Many of the estimated coefficients in the studies are statistically insignificant, and in some cases the estimates are significant but with the wrong sign (i.e., positive effects of cost increases on the value of shipments, seemingly implying "negative leakage").
    - The international leakage study provides plots of values at the 25th and 75th quantiles from 192 separate regression models, but does not provide a sense of the error structure around these estimates.
    - The domestic study fails to report confidence intervals around their leakage estimates for individual industries.
    - The empirical approach taken in each paper introduces a vastly larger error structure which is entirely absent in the old metrics (energy intensity and trade exposure), and will require clarification on how this error structure will be handled in formulating policy on allowance allocations:
        - Are leakage estimates to be taken as zero when the estimated coefficient from that industry is significantly indistinguishable from zero?
        - And what is the prescribed confidence level for making this determination?
        - If a coefficient is large, but not significantly different from zero, how does CARB intend to use this estimated value, as opposed to a smaller, but highly significant coefficient?

2. **How does CARB intend to use the Cal Poly study for determining allowance allocations to the food processing industry?**

    CARB allocated public funds to the Cal Poly study, which met its stated goal of measuring production leakage in four of the largest food processing

industries in California. How do these estimated leakage results fit in with the new metrics proposed by CARB for making allowance allocations?

3. **The Brattle Report indicates that changes in the total value of shipments is an unreliable proxy for leakage. (see 1.C., page 6, *Brattle*)**

> The Brattle Group Report notes that the key unit of measurement for leakage is the quantity of reduced production in California that is offset one-to-one by increased production in unregulated regions. That is, leakage refers to changes in quantities produced. Both the domestic and international study estimate the effect of changes in energy prices on the total value of shipment (i.e., sales), which is the product of price times quantity in each market.
>
> It is well-established in economics that sales can rise or fall with a change in quantity produced depending on the elasticity of demand in the particular market. Specifically: (i) if demand is unit-elastic, a decrease in regional production results in no change in sales; (ii) if demand is inelastic, a decrease in production results in an *increase* in sales; and (iii) if demand is elastic, a decrease in production results in a *decrease* in sales.

The Brattle Group Report found that use of sales (total value of shipments) as the outcome variable in both the Domestic and International studies to be an unreliable proxy for production and emissions leakage. Brattle believes the same estimated effect on the value of shipments can be associated with positive, negative, or zero leakage depending on the unobserved value of the demand elasticity in each industry.

Of the points listed by Dr. Levy, the second is by far the most significant. Neither the Fowlie Study nor the RFF Study looks to market demand in estimating potential leakage. While this does not necessarily invalidate either study, it does present additional problems of relevance when confronted with the factors impacting the food processing industry markets.

As noted in CLFP's previous comments, the Brattle Report found that the new metrics being proposed are relatively imprecise. Moreover, the data and variables employed by both studies do not seem to be appropriate for obtaining estimates of the parameters necessary to measure market transfer and emissions leakages, especially when applied to the food processing industry.

Any analysis of leakages without consideration of markets is no analysis at all. Development of a 4th Compliance Period AF for food processors must include a thorough analysis of market demand given the uniqueness of the food processing industry. An attempt to shoehorn food processors into the current analysis as set forth in the Fowlie and RFF studies risks not only

damaging the competitiveness of California's food processing industry but runs the secondary risk of negatively impacting the local economies in which food processors operate.

In closing, CLFP reiterates the need for CARB to acknowledge the uniqueness of the food processing industry in California. The fact that the food processing industry accounts for only .4 percent of the total industrial GHG emissions in the state should not be grounds for discounting or ignoring the impacts of the leakage risk to facilities subject to the cap-and-trade.

Proposed Changes in CARB Methodology for Estimating Leakage Risk

In light of the proposal to develop a new metric for assessing leakage risk CARB must be willing to do the necessary work in order to assure each of the industry stakeholders that their AFs will be based on the best available data. For instance, any leakage analysis should include a discussion and analysis of the upstream and downstream impacts on regulated and/or non-regulated entities. For example, economic impacts to cheese producers would have an impact on downstream products (i.e., protein and lactose) as well as upstream suppliers to the cheese producers (i.e., dairies, etc.).

For the food processing industry, CARB's path is clear. Given the uniqueness of the industry, special emphasis must be employed to account for the variables in our markets that exist in no other industries. The Hamilton et. al. study is a good start, and makes a strong and, to date, unrefuted argument for continuing 100% transition assistance for food processors beginning 2018. As for post-2020 metrics, both the Fowlie Study and the RFF Study need to be augmented to accurately reflect the market demands present in the food processing industry.

CLFP Recommendations

There is much at stake with the path that CARB chooses based on these studies. The food processing industry in California generates nearly 200,000 jobs, $25 billion in value added to the economy, and $8.2 billion in state and local tax revenue. Tomato, cheese, snack food, and dehydrated vegetable processors are a large component of the industry and stand to incur substantial compliance costs in the future given the increase in emission reductions mandated under SB 32.

1. CARB should consider an additional study to augment the Fowlie and RFF studies in order to include market demand data specific to the food processing industry for use in the development of the new metrics for determining AFs in the 4th compliance period.

CLFP looks forward to continued dialogue on this topic and providing information about the impact of SB 32 on the California food processing industry.

Comments on Staff's Proposed Changes (Appendix A)

Transfer of Unsold Allowances to the Allowance Price Containment Reserve

A new proposed provision allows CARB to transfer unsold allowances from the Current Auction, if unsold for 24 months after their initial sale date, to be transferred to the Allowance Price Containment Reserve and made available through a Reserve Sale. This process would come into effect January 1, 2018.4

According to CARB, this proposed provision is necessary to allow CARB to remove allowances that remain unsold after two years from immediate availability, and to supplement the Allowance Price Containment Reserve when the market is depressed for a lengthy period of time. However, CARB's the cost of a bigger Containment Reserve to deal with rising allowance pricing, comes at the prices of contributing to a smaller pool of allowance and generating potentially higher prices.

Additionally, CLFP understands that the that the cap-and-trade is back loaded in the third compliance period and given the state's failure to anticipate the most recent auction events, CLFP lacks confidence in CARB's proposed amendment and that such manipulation risks additional damage to the market.

This proposal needs additional vetting before considering it for implementation.

Purchased Electricity/Indirect Emissions

Under the current framework, CARB calculates benchmarks using only direct emissions and steam purchases. For indirect emissions, the CPUC determines how the utilities distribute compensation to eligible entities. (D.14-12-037). According to CARB, the proposed changes will update benchmarks to include the emissions for electricity purchases, same as they do with emissions for steam purchases in calculating benchmarks and make CARB, not the IOUs and POUs, the distributors of compensation (allowances) to eligible entities for indirect emissions.

CLFP has worked with staff on its proposed changes regarding accounting for indirect emissions /purchased electricity. CLFP originally opposed this proposal under the belief that this would eventually be added to a facilities compliance obligation. Staff indicated that that was not the case and that the proposal would not increase obligations.

CLFP sees the benefit of the utilities no longer distributing compensation to covered entities in their service territories. But CLFP needs more assurances that the proposed changes to the benchmark are not significant and will not result in a greater financial impact in the future than CARB suggests. CLFP needs additional clarification regarding the changes to the benchmark, specifically a formula or other methodology that will allow covered facilities to determine any

potential financial impacts. CLFP looks forward to further discussion on this proposed amendment with CARB.

As for the distribution of the compensation to covered entities, CLFP also recommends that CARB provide covered entities with an option to take either allowance from CARB or a check/bill credit from energy supplier.

Retirement Only Limited Linkage

CLFP is opposed to the adoption of Section 95945 granting the Board the ability to approve Retirement-Only agreements with external GHG programs. It is premature. CARB should not allow external entities to purchase allowances to be used in external compliance situations unless the external program has an operating cap-and-trade program through which California covered entities may obtain external allowances as well. Allowing external entities to purchase California allowances for retirement-only will drive up the cost of compliance for California's covered entities providing increased costs for California populace without significant benefits being obtained in exchange.

New Product Lines from Covered Facilities

CARB staff should consider the development of criteria that would provide allowances for covered entities for the development of new products. Currently, covered facilities cannot receive credits for emissions from new product lines until a benchmark is developed by CARB. The new product line cannot be issued an energy-based benchmark if the product is produced on a site that is subject to a product-based benchmark. The lack of a benchmark that will allow for additional allowances stifles innovation.

CARB should develop criteria that will allow the issuance of an interim benchmark or energy-based benchmark, pending the development of a final benchmark for the new production line. The interim benchmark could be subject to true-up to prevent windfalls.

Milk Powder Definitional Changes

(A) The term "milk powder" used in the definitions of milk powder (high heat), milk powder (low heat) and milk powder (medium heat) is a broad term that includes the following:

- Skimmed milk powder (SMP) – skimmed milk powder obtained through standardization with lactose and dried; and
- Non-fat dried milk powder (NFDM) – non-fat, non-standardized dried milk powder.

It is recommended that the term "milk powder" be included with the above definitions to provide additional clarity.

(B) CARB proposes to remove the benchmark for "cream", substituting "anhydrous milk fat processing" as the term for the same benchmark. The CARB definition of "anhydrous milk fat" does not include cream in the definition.

It is recommended that CARB modify the definition of "anhydrous milk fat" as follows:

> Anhydrous milk fat means fatty products, including cream, derived exclusively from milk and/or products obtained from milk by means of processes which result in almost total removal of water and non-fat solids.

The recommended modified definition ensures that cream is included in the benchmark as defined by ARB.

(C) CLFP notes that the product benchmarks for milk powder (medium heat and high heat) and milk powder (low heat) are different. There is no explanation or rationale explaining the reason for the different benchmarks. CLFP would like to discuss with CARB staff the reason behind the different benchmarks.

Verification Requirements

Staff proposes to change the verification deadline from September 1 each year, to August 1, to support implementation of the cap-and-trade program. CARB staff has cited insufficient time to perform required duties mandated under the cap-and -trade programs and that providing an additional month after the verification deadline allows ARB sufficient time to assess a compliance obligation to all covered entities, as well as calculate allowance allocation amounts, prior to the November 1 Cap-and-Trade Regulation compliance deadline.

. As CARB staff notes in the Initial Statement of Reasons for the MRR:

> While the implementation of the change to the verification deadline may allow less time for reporting entities to verify their data, it will provide these entities more time to review their compliance obligation, assess how many allowances they receive, and make arrangements to acquire any additional compliance instruments needed for timely compliance. (page 10)

While this may not have much impact on covered entities operating year-round, food processors, due to seasonal operations, will be hard pressed to accommodate this change in the verification deadline. For food processors, this time change occurs in the middle of the

processing season. Processors operate 24/7 for approximately 90 to 110 days beginning July through mid-October depending upon the product and the harvest.

Verification requires on-site inspections and frequent requests for data at the most intensive production time of the year. These difficulties are compounded by CARB's regulation requiring that covered entities must change verifiers every three years.

CARB staff needs to acknowledge the difficulties that this proposed change inflicts on food processors. CLFP wishes to work with CARB staff to develop criteria that will seek to accommodate food processing operations allowing for a smooth verification without interference with production during this critical time.

One suggestion would be to allow food processors to contract with verifiers for six years instead of the current three. This would allow the verifier to become familiar with food processing operations and could expedite the verification process cutting back on the need for frequent data requests, additional CARB audits, and additional expenses.

NTSS/TSS

CLFP welcomes the proposed changes to the TSS or NTSS as the methodology is consistent with industry practice and will result in a more accurate measurement of Tomato Soluble Solids.