## REBUTTAL TESTIMONY OF

RON MONG, CPA
Appearing on Behalf of the Area 2 Milk Dealers
Rebuttal Testimony before Pennsylvania Milk Marketing Board
Cost Replacement Hearing Based on 2017 Annual Reports
April 3, 2019

## Rebuttal Testimony of Ron Mong, CPA

## Area 2 - Cost Replacement Hearing

I am Ronald W. Mong, Senior Manager at Herbein + Company, Inc. and my address is 2763 Century Blvd., Reading, PA 19610. I wish to present Rebuttal Testimony on behalf of the Area 2 Milk Dealers. I attach my Curriculum Vitae, as Rebuttal Exhibit D1, which outlines my education, and experience in the dairy industry.

## Study Conducted

On behalf of the Area 2 Milk Dealers, I have reviewed the audit files and proposed adjustments prepared by the Pennsylvania Milk Marketing Board audit staff, have conducted fieldwork at each of the dealers in the cross-section and have prepared exhibits which present my findings.

## Cost Replacement Process

This hearing will accomplish the annual cost replacement process in which the Pennsylvania Milk Marketing Board substitutes new cost information for the prior information, which is then utilized in developing its wholesale and resale prices. This hearing will include a container cost update utilizing April 2018 cost information as the new starting point for container updating. These April 2018 container costs are updated monthly based upon cost information submitted by the cross-section dealers and reviewed by Board staff. This hearing will also include ingredient cost updating utilizing April 2018 cost information. Ingredient costs are updated on a quarterly basis for flavored milk, flavored reduced fat milk and flavored non-fat milk. These updates occur on January $1^{\text {st }}$, April $1^{\text {st }}$, July $1^{\text {st }}$, and October $1^{\text {st }}$ of each year. All exhibits are prepared utilizing a weighted average based on each dealer's percentage of controlled sales in the area relative to its sales. All exhibits have been adjusted for inter-plant transfers. An inter-plant transfer is a transaction where a product is manufactured in one plant and transferred to an affiliate plant that then sells the product to the ultimate consumer. These exhibits have been prepared reflecting the sales to the ultimate consumer in the applicable area. This weighting and averaging method has been consistently applied from year to year.

## Cross-Section

The Area 2 cross-section of dealers utilized includes Clover Farms Dairy Co., Dean Dairy Holdings LLC dba Swiss Premium Dairy, Milk Industry Management Corp. T/A Balford Farms, Monroe County Milk Producers Coop Assoc. dba Pocono Mountain Dairies, Turkey Hill LP dba Turkey Hill Dairy, Tuscan/Lehigh Dairies, Inc
(Schuylkill Haven), Valley Farms Dairy LLC, and Wawa Beverage Company. Two processing dealers have been added to the cross-section: Valley Farms and Wawa. Also, two non-processing dealers have been added to the cross-section: Balford Farms and Pocono Mountain. The cross-section companies process, package and deliver most of the controlled milk products in Area 2. This group of companies includes organizations that deliver to supermarkets, convenience stores, schools, institutions, and small retail outlets. In my opinion this cross-section of dealers is representative of the dealers selling controlled milk products in Area 2.

## Rebuttal Exhibits

Rebuttal Exhibit D2 reflects the processing, packaging, and delivery cost per point for calendar year 2017. Please note that the points presented are for sales in the PMMB Area 2 made by the cross-section dealers. These costs should replace the existing costs from 2016, which are currently being utilized by the Board in establishing prices. These costs are calculated in accordance with PMMB rules and regulations and have been consistently applied from the previous year. Our calculation of the processing, packaging, and delivery costs agrees with the amount presented by Board Staff on Staff Exhibit 2.

Rebuttal Exhibit D2-A is prepared to reflect the effect of the cost replacement process by comparing the 2016 processing, packaging, and delivery costs in the current order with the 2017 processing, packaging, and delivery costs. Additionally, this exhibit reflects the 2018 cost increase adjustment from Exhibit D7 and removes the 2017 cost increase adjustment. Including the cost update adjustments, the increase in the cross-section dealer costs from the prior cost replacement hearing is $\$ 0.0644$ per quart equivalent (point), or $\$ 0.2576$ per gallon.

Exhibit D2 shows the number of points (quart equivalents) that are associated with each cost center. For example, the bottling department points for 2017 are $91,002,658$ for the cross-section. The additions to the crosssection resulted in an increase of about $5,000,000$ points. This was offset by a decrease in the amounts packaged at the dealers that were in last year's cross-section of about $2,500,000$ points. All the Area 2 cross-section dealers that were in last year's cross-section had a decrease in the quantity of products processed, packaged and delivered in 2017 compared to 2016.

Rebuttal Exhibit D3 and D3-A have been updated to container costs utilized in the March 2019 resale price development. The container shrinkage factor reflected on this exhibit is a statewide average and will be utilized for all areas. This study was conducted for the period January to March 2009 and it is my opinion that it Submitted: March 20, 2019
is reasonable to continue using this study's container shrinkage statistics for these Cost Replacement Hearings. There are no controlled milk products sold in Area 2 in paper half gallons, 12-ounce containers, or 10 -ounce containers. The container sizes indicated with footnote (5) should continue to be updated monthly when minimum prices are announced using April 2018 as the new starting point.

Our container cost calculations agree with those calculated by Board Staff and presented in their Staff Exhibit 3.

Rebuttal Exhibit D4 is prepared to present the ingredient costs per pound of finished product as of April 2018 for inclusion in the product formulas used in the monthly price announcements. Rebuttal Exhibit D4-A reflects the ingredient costs presented on Rebuttal D4 and shows the increase or decrease from the ingredient costs used in calculating the March 2019 minimum prices.

The ingredient costs are shown on D4 in cents per pound of finished product. The PMMB minimum price calculations multiply these ingredient costs per pound times the milk weight of each container size. For example, a quart of flavored milk weighs 2.0 pounds. The PMMB price formulas would calculate the ingredient costs of a quart of flavored milk by multiplying the quart weight of 2.0 times the ingredient cost of $\$ 0.0432$, which is $\$ 0.0864$ per quart.

Our ingredient cost calculations agree with those calculated by Board Staff and presented in their Staff Exhibit 4.

Rebuttal Exhibit D5 updates the cost of milk shrinkage and the costs and revenues from bulk cream and bulk milk transactions. Milk shrinkage in a dairy plant is the cost of milk that is purchased from dairy farmers or dairy cooperatives but not accounted for in any finished products. The cross-section dairy plants have two types of bulk milk transactions. The first type of transaction is when raw milk not needed by the plant goes directly from the farm to another dairy plant. The plant buying the unneeded milk typically manufactures cheese or nonfat dry milk. This transaction is called a diversion. The second type of transaction is when milk is received, standardized, and pasteurized, and then shipped to a food manufacturing plant. The purchasing plant could make candy, baked goods, puddings, soups, or many other varieties of food products. These transactions are called transfers. In Exhibit D5 both types of transactions are combined on the bulk milk row. Bulk cream sales occur at
fluid milk plants because the butterfat test of the incoming raw milk is about $3.8 \%$ butterfat, and the average butterfat test of the packaged products sold is closer to $2.0 \%$ butterfat.

The PMMB monthly price calculations correctly account for the costs of milk shrinkage and the costs and revenues for the sales of bulk cream and bulk milk.

The current order establishes a net revenue of ( $\$ 0.0022$ ) per pound and the new net cost, based on 2017 transactions is $\$ 0.0004$ per pound. There has been a new net change of $\$ 0.0026$ per pound.

Our calculation of milk shrinkage costs and the costs and revenues of bulk milk and bulk cream transactions agree with those calculated by Board Staff and presented in their Staff Exhibit 5.

Rebuttal Exhibit D6 reflects a comparison of the current order butterfat tests by product type and compares those tests with the 2017 actual butterfat tests. This exhibit also reflects the increase or decrease in butterfat content. Because the butterfat component of milk has a higher cost than the skim component, a decrease in butterfat content will result in a decrease in the cost of milk in the wholesale and resale prices. An increase in butterfat content will increase the cost of milk in finished products. I recommend that the Board replace the current butterfat by product with the 2017 tests reflected on this exhibit.

Our calculations of butterfat content by product type agree with those calculated by Board Staff and presented in their Staff Exhibit 6.

Rebuttal Exhibit D7 is prepared to calculate the cost increases and decreases incurred during the six (6) month period ending June 30,2018 with the six (6) month period ending June 30, 2017 for three important expense categories in a dairy plant. These three expenses are: labor and fringe benefits, utilities, and insurance. This adjustment allows for an updating of significant costs, which can change significantly from year to year. This year the cost increase (decrease) analysis was calculated with utilizing the first six (6) months of 2018 and comparing that with the first six (6) months for 2017. The weighted points for the first six (6) months of 2018 are $2.5 \%$ less than the weighted points for the first six (6) months of 2017. The three expense categories used in this calculation increased $1.0 \%$ during that same period.

Our calculation of the cost increases for labor, insurance and utility expenses agree with those calculated by Board Staff and presented in their Staff Exhibit 7.

Rebuttal Exhibit D8 has been updated to reflect the December 2018 diesel fuel costs, which were used in calculating the minimum prices for March 2019. Additionally, this exhibit reflects the calculation of the average diesel fuel cost for calendar year 2017, which becomes the new starting point for the monthly adjustments. I recommend that this adjustment be continued monthly. The average diesel fuel cost for 2017 for the cross-section dealers is $\$ 0.0096$ per point. This amount varies in each area based on distances traveled, delivery sizes, and fleet fuel efficiency.

Rebuttal Exhibit D9 has been updated to reflect October 2018 natural gas costs and reflects OGO A-937 effective June 1, 2006 concerning heating fuel costs. Additionally, this exhibit reflects the calculation of the average heating fuel cost for calendar year 2017, which becomes the new starting point for the monthly adjustments. I recommend that this adjustment be continued monthly.

Our calculation of the cost increases for the diesel fuel adjustment and the heating fuels adjustment agree with those calculated by Board Staff and presented in their Staff Exhibits 8 \& 9 .

## Container Efficiency Adjustment

An important part of the calculation of PMMB's minimum resale prices is the container efficiency adjustment. These adjustments are in place to allocate the fluid milk processors' costs appropriately to the various sizes of containers sold. The impact of the container efficiency adjustment is to deduct costs from the two larger packages, gallons and half gallons, and to add costs to the smaller containers. Our calculation of updated container efficiency adjustments is shown at Exhibit D10.

The container efficiency adjustment was implemented to be revenue neutral, meaning the container efficiency adjustment did not add costs and did not generate new revenue. The adjustments as originally calculated added a dollar of costs to the smaller containers for every dollar deducted from the larger containers. When correctly calculated the container efficiency adjustments will not be a revenue-generation tool, but instead will serve as a cost allocation tool. The plusses should equal the minuses so that the total of plusses and minuses foots to zero.

The container efficiency adjustments currently used in the monthly PMMB price calculations have not been updated for more than ten years. During those years there have been significant changes in four important areas:

1) The number of containers of each size sold in the Area 2 has changed. We have observed changes in both the mix of container sizes sold and the total volume of milk packaged at cross-section dealers. In 2006 gallons represented about $56 \%$ of the volume of milk sold. In 2017 gallon container sales decreased to $54 \%$ of milk sold in Area 2. Half pint sales in 2006 were about 21 million units, or $10 \%$ of Area 2 milk sales. In 2017 Area 2 cross-section dealers sold about 19 million half pints. Half pint sales in 2017 accounted for $9 \%$ of the Area 2 sales volume. Milk sold in Area 2 in dispenser containers increased by $67 \%$, and 4 -ounce containers decreased by $29 \%$. These identified changes should now be reflected in an updated container efficiency adjustment to ensure revenue neutrality by area.
2) The current container efficiency adjustments are based on an estimate to determine the quantity of each container. In this hearing our Exhibits and Staff Exhibits are based on actual container sales in Area 2.
3) The speeds of the machines filling containers at some of the cross-section dealers have changed over time. As a result, the amount of time it takes at each plant to package the products has changed and this should be updated as the amount of time it takes to package each container size is the key factor in allocating the bottling cost center costs.
4) The cost center costs of the processors filling those containers have changed at the individual plants. In total the bottling costs center costs per point are about the same in 2017 as they were in 2006. However, the individual dealers making up the cross-section had significant changes, with individual plants increasing $23 \%$ and $39 \%$, and decreasing $59 \%$ and $21 \%$. In 2006 the Area 2 cross-section dealers packaged about 52 million points of controlled products at an average cost of $\$ 0.0351$ per point. In 2017 the cross-section packaged 51 million points of controlled products at an average cost of $\$ 0.0361$ per point. Total quantity of products packaged in 2017 is about the same as in 2006. However, the volume has shifted between plants, each with different costs. As each plant's bottling costs changed, and sizes filled changed, the allocation between large containers and small containers changed as well.

The current container efficiency adjustment currently used has two components:

1) Bottling costs allocation - based on filling speeds at each processing plant
2) Cold room and delivery costs allocation - based on number of units packed in a plastic milk case. Our proposed container adjustment has these same two components as the current adjustment but updates the inputs and incorporates two additional adjustments: (1) utilization of actual sales volume for the area versus an estimate for 2017, and (2) an adjustment for number of line operators.

Every cross-section dealer was visited by either me or another accountant from the Herbein dairy group at my direction. At each plant we observed the actual speed at which each container size was packaged. For example, at Plant "A" the half pint machine was operating at 340 units per minute. We also observed the number of employees operating each filling line. Some packaging lines filling plastic containers require two employees, other fillers only need one employee. We observed and recorded how many units each plant put in a plastic milk case. For example, a standard milk case holds four gallons, nine half gallons, and sixteen quarts. One dealer in the cross-section uses larger milk cases that hold six gallons. The container efficiency adjustment allocates the cold room and delivery costs by the milk case rather than the individual units. The number of units per case was needed to correctly compute the number of milk cases used for each container size. We also worked with PMMB Staff to obtain actual sales of cross section dealers by Area to update the calculations to reflect current container sales quantities specific to the area at issue.

## Bottling Cost Center

The bottling cost center costs shown on Exhibit D2 are $\$ 0.0361$ per point. This is an average of all sizes packaged at all the cross-section plants. Our calculation starts with this average cost. The goal of the calculation, which we achieved, is to adjust the average bottling cost center costs for the individual container sizes so that in total the average cost per point remained $\$ 0.0361$. Our next step in the updated container efficiency adjustment divided the bottling cost center costs into two categories: labor and fringe benefits and all other costs.

We calculated the number of minutes that each plant used to package the quantity of containers sold in Area 2 by that plant. We calculated the minutes two ways: once with the number of filler operators included, and once with just the machine speeds without regard to the number of operators. We used the number of minutes with the number of filler operators included to allocate that plant's bottling labor and fringe benefits. We used the number of minutes with just the machine speeds to allocate all the non-labor costs: repairs and maintenance,
depreciation, supplies, utilities, equipment rental, etc. For each plant we made certain that we only allocated the actual costs for that plant. We made certain that the minuses from the large containers equaled the addons to the small containers to ensure revenue neutrality.

The concept of using the number of filler operators for the labor cost allocation was not used ten years ago when the current container efficiency adjustments were calculated. Some of the half gallon, quart, and pint containers sold in Area 2 back then were in paper containers. Those paper carton filling machines only had one operator. Today all the half gallons, and almost all the quarts and pints sold are in plastic containers. Many of those plastic packaging machines require two operators. The number of operators is now an important factor in allocating labor costs in the bottling department accurately.

For the non-labor costs, it is correct to allocate using only the machine filling speeds without considering the number of operators. The number of operators working on a filling line directly changes labor costs, but not the other costs like repairs and maintenance, supplies, utilities, and other non-payroll costs.

## Cold Room and Delivery Cost Centers

The cold room cost center costs shown on Exhibit D2 are $\$ 0.0392$ per point and delivery cost center costs per point are $\$ 0.1213$ per point. An allocation of the costs in these in two cost centers is needed because dairy container packages are not sold individually but in plastic milk cases. The dairy employees handle these cases and not the individual units. Each plastic case holds a different number of points for each container size.

We calculated the number of milk cases each plant used to handle the containers it sold in 2017. We allocated the total cold room and delivery costs to each size based on the number of milk cases used for that size. As we did in the bottling cost center allocation, we made certain we only allocated the actual costs at that plant. No additional costs were added or deducted. The cold room and delivery costs pluses and minuses were equal. The adjustments were revenue neutral.

## Exhibit D10

Exhibit D10 shows the results of our container efficiency update calculations. The actual quantity of each size container is shown in the first column. These quantities are multiplied by our calculated container efficiency adjustments to determine the impact on cross-section dealer revenue. For example, the updated adjustments would allocate $\$ 695,739$ of costs out of the gallon package and add $\$ 648,964$ of costs to the paper half pint. The net
effect of the plusses and minuses is revenue to the dealers of $\$ 486$. This isn't zero because we are only calculating the container efficiency adjustments to four decimal places, but in the world of accounting this kind of small difference due to rounding is reasonable.

I recommend that the container efficiency adjustments be updated in this cost replacement hearing. In addition, I recommend that adjusting these important factors becomes part of every year's cost replacement hearing so that revenue neutrality can be maintained from year-to-year.

## Summary

Rebuttal Exhibit D11-A and D11-B are prepared to reflect the wholesale minimum price for a gallon of reduced fat milk and a half pint of flavored non-fat milk for March 2019. These exhibits also cross-reference the exhibits that support the individual line items.

## Class II Controlled Products

The annual cost replacement process could include an updating of Class II product costs. Class II controlled products include half \& half, light cream, sour cream, and heavy cream. We are not presenting any recommendation to change the method used for Class II pricing. We ask that the Board continue with the existing methodology. The Area 2 milk dealers have considered and will continue to review other approaches but do not see a need for modifying the status quo.

## Rate of Return

I recommend that the Board maintain the rate of return for the Area 2 dealers at $3.5 \%$. Milk dealers in Area 2 and across the Commonwealth are facing a serious battle for profitability as fluid milk demand continues to decline year-over-year.

I reviewed the Statements of Operations for the year ended 12/31/2017 for the eight cross-section dealers. These are submitted by the dealers on Exhibit B of the PMMB-60 Milk Dealer's Financial Statement. The 2017 weighted average rate of return for the Area 2 cross-section dealers was $2.1 \%$. That percentage is not a good news story from a Milk Marketing Board price setting standpoint however - the profitability of plants that are focused on serving the fluid milk market and buying Pennsylvania raw milk are struggling for profitability. Three of the eight cross-section dealers had operating losses in 2017. Three of the cross-section dealers that had operating profits in 2017 are significant processors of non-controlled drinks and iced teas. The Board may be
wondering how the rate of return can be that low for the dealers that don't process and package significant amounts of non-controlled drinks and teas if the statutory rate of return is set at $3.5 \%$. There are many reasons, including the fact that cost replacement lags the period when the operating costs were incurred. Given this profit and loss situation, it is essential that the Board continue the rate of return of at least $3.5 \%$.

## Summary and Recommendation

The Area 2 Milk Dealers recommend that the Milk Marketing Board make the cost replacement adjustments, which are reflected in my testimony and exhibits. Thank you for your consideration of my analysis and opinions.

