

STAFF TESTIMONY BEFORE THE PENNSYLVANIA MILK MARKETING BOARD  
COST REPLACEMENT HEARING – MILK MARKETING AREA 1  
May 1, 2019

**Staff Exhibit 1**

Good Morning. My name is Clifford Ackman. As the Statistician for the Pennsylvania Milk Marketing Board, I collected the information for and produced Staff Exhibit 1, dealing with the cross-section of milk dealers in Area 1. I have listed these five milk dealers in footnote 3 along with the percentage of sales by those dealers compared to the population of all 37 dealers selling into the Southeastern Pennsylvania Milk Marketing Area. This judgmental sample was selected from available dealers as having the largest sales in the area. They account for almost seventy nine percent of Area 1's reported milk sales.

The dealers used for the cross-section to gather 2017 information have changed from previous Area 1 cost replacement hearings. A single dealer identified on Exhibit 1 was added to achieve a uniform standard of selection for each area.

This exhibit offers the cross-section of dealers as presenting a significant portion of all sales into the marketplace. It demonstrates the ratios of controlled product sales by all dealers (the top section of the exhibit) and the cross-section dealers (in the lower half of the exhibit). This comparison of product sales ratios falls within statistically acceptable limits using the Chi-square goodness of fit test. This test evaluates the difference between the observed sample ratios and the expected ratios from the known population. The cross-section dealers are the observed sample, and all dealers with reported sales in Area 1 are the known population. In other words, the reported sales ratios of these cross-section dealers are very much like the reported sales ratios of all dealers in Area 1.

I also studied the size and types of deliveries of the cross-section dealers along with the types of customers served by them. As a group, the cross-section dealers serve a variety of customers from small deliveries at schools and restaurants to large deliveries at supermarkets. These dealers use a variety of delivery vehicles including smaller, straight body trucks and tractor-trailers. This reflects all dealer sales into Marketing Area 1.

Based on the amount and type of milk sold by these cross-section dealers, the types of customers and the delivery techniques employed by these listed dealers, I find this cross-section to be representative of all dealers doing business in Milk Marketing Area 1. Their data is used for subsequent exhibits.

---

Good morning. My name is Gary Gojsovich. I am employed by the Pennsylvania Milk Marketing Board as an Audit Supervisor. This morning I will be testifying to Staff Exhibits 2 through 12.

### **Staff Exhibit 2**

This Exhibit provides information about the average weighted cost for processing, packaging and delivering milk for the Area 1 cross-section milk dealers. For each of the major cost centers we have matched the expenses associated with the cost center with the volume of milk or other products that flowed through that cost center. The volumes are stated in points (where a point equals a quart or quart equivalent). All costs and points are weighted using the sales weighting method. For example, if a dealer has 25% of their sales in Area 1 then we include 25% of their costs and 25% of their points in the Area 1 cost centers.

Staff recommends that the Board replace the costs in the current Order with those costs in this Exhibit.

### **Staff Exhibit 3**

This Exhibit provides information on the cost of containers for the cross-section dealers. We initially use the costs of the cross-section dealers for plastic containers, paper containers and resin as of April 2018 to calculate weighted cost per units. As has been done in previous hearings, we are using controlled container sales volumes for the previous year. We are therefore pairing current costs with the weighted units sold in the previous year to arrive at the most current weighted cost per unit available. After we established a cost for each container type in Column E, we are updating those April 2018 costs to the costs observed in our most current container surveys in Column F (April 2019). In Column G we are applying factors for container shrinkage. Column H adds the shrinkage factor to the updated container cost in Column F.

Staff recommends that the Board replace the base container costs with those found in Column C and the base weighted units with those in Column D and continue to update these costs using the audited surveys submitted by the cross-section dealers. Staff also recommends that the Board continue the practice of providing separate plastic and paper half-pint prices through a plastic add-on.

Staff further recommends that the Board replace the current container costs with the costs found in column E.

#### **Staff Exhibit 4**

This Exhibit provides information on the cost of ingredients added to the various milk products like chocolate powder and sugar used in chocolate milk. This Exhibit pairs Year 2017 sales activity with April 2018 costs to get current weighted costs.

Staff recommends replacing the current ingredient costs with those in this Exhibit. Staff further recommends the continuance of updating chocolate and sweetener costs quarterly.

#### **Staff Exhibit 5**

Dealers typically sell off excess bulk milk and cream they are unable to use in their own plants and they will recognize either a profit or a loss on these sales. Dealers also lose small amounts of milk as it moves through the plant; this loss is called shrinkage.

Row 1 shows the calculation for shrinkage cost. Column G shows the weighted costs using the sales weighting method.

Rows 2, 3 and 5 show calculations for determining profits and/or losses on diverted or transferred sales of bulk milk and cream. Dealers incur additional costs to process and sell transferred milk and cream (Column E). We add these additional processing costs to the producer costs in Column D to determine if the dealers made a profit or loss on the transactions.

The costs in the top panel are summarized in Column H. We divide these costs by the number of pounds of product sold or manufactured by the dealers (net of purchased packaged products) in Column I. By dividing the costs in Column H by the pounds in Column I we arrive at a weighted cost per pound in Column J.

Staff recommends that the Board use the costs and profits in this Exhibit to replace those in the existing Order.

#### **Staff Exhibit 6**

This Exhibit summarizes the costs of the milk components. We are using the most current announced milk prices available prior to the submission date for the Exhibits. The current fat and skim prices for Class I products are in the top panel. In the lower panel we show the actual pounds of the Class I products (Columns A and B) sold by the cross-section dealers in this Area. We have labeled the columns A through K and show how we arrive at the cost per pound for each of the products in the table.

Staff recommends that the Board continue to use this method for establishing the before-bottling costs.

### **Staff Exhibit 7**

In this Exhibit we compare the costs and related plant volumes for three significant categories (labor, utilities, and insurance) for the 1<sup>st</sup> half of Year 2018 with the 1<sup>st</sup> half of 2017 to update the cost per point from Staff Exhibit 2. We use bottling points as the denominator as they are a good measure of the plants' overall volume or activity. In columns A and B, we list the first half-year costs for 2018 and 2017 for each of the cost categories. In the next two columns, we list the bottling points for 2018 and 2017 for the first half-year. By dividing the costs by the points in columns E and F, we can compare the cost increase or decrease per point in column G.

Staff recommends replacing the first half cost adjustment in the current Order with the adjustment in this Exhibit.

### **Staff Exhibit 8**

In this Exhibit we update diesel fuel costs from the previous year (Year 2017) by indexing to diesel prices for the most current month (February 2019). Line 1 shows the weighted cost for diesel fuel for the cross-section dealers for Year 2017. Line 2 is the Year 2017 average On-Highway diesel price per gallon as posted by the Energy Information Administration (EIA). Line 3 is the current EIA On-Highway diesel price. Line 4 shows the percentage of change in the diesel price from Year 2017 to the current price. Line 5 shows the current presumed diesel cost. By subtracting line 1 from line 5 we find the changed diesel cost on line 6. And by dividing the changed diesel cost on line 6 by the weighted delivery points of the cross-section dealers, we find the changed cost per point on line 8.

Staff recommends that the Board continue to include this adjustment in the cost replacement process. Staff also recommends that the Board replace the Year 2016 points and costs with the Year 2017 points and costs found in this Exhibit.

### **Staff Exhibit 9**

Staff has calculated the current heating fuel add-on using the same methodology as in Staff Exhibit 8 except here we are using Standardization and Pasteurization points and the Pennsylvania Natural Gas Industrial price as posted by the EIA. Staff recommends that the Board continue to include this adjustment in the cost replacement process. Staff also recommends that the Board replace the 2016 points and costs with the 2017 points and costs found in this Exhibit.

## **Staff Exhibit 10**

The 'cost per points' from Staff Exhibit 2 for Bottling, Cold Room and Delivery represent overall averages for filling and handling a quart equivalent of product. However, there are efficiencies in filling and handling fluid product in larger sized containers than in smaller sized containers that make it more costly to fill and handle smaller sized containers. In the Bottling cost center, the same amount of product can be filled in less time using half gallon containers than half pint containers. For example, the Statewide cross-section Dealers can fill on average 100 half gallons per minute which equates to 6,400 fluid ounces; whereas they can only fill on average 320 paper half pints per minute which equates to 2,560 fluid ounces. And in the Cold Room and Delivery cost centers where fluid product is handled in plastic milk crates, typically more volume can be handled in a milk crate of larger sized containers than of smaller sized containers. For example, Dealers place nine half gallons in a milk crate which equates to 576 fluid ounces (9 x 64); by comparison they place 50 half pints in a milk crate which equates to only 400 fluid ounces (50 x 8).

To better match the Bottling, Cold Room and Delivery costs with the various container sizes, container efficiency studies were performed at each of the processing cross-section dealers. For each study, the following data was gathered and confirmed: Area 1 specific sales of controlled product by container size for 2017, filling speeds per bottling machine, number of employees working each bottling machine and the number of containers handled in a milk crate.

The Area 1 sales, filling speed and number of employee data were used to calculate the adjustment for Bottling. For each dealer, and for each container size, the Area 1 sales are divided by the applicable filling speed to determine how much time was used to fill those containers for the year. The time for each container is then divided by the total time for all containers to derive percentages. The percentages are then multiplied by total non-labor Bottling costs to determine how much non-labor Bottling costs are allocated to each container size. The same is done for labor Bottling costs with the only difference being that we multiply the total minutes for each container size by the number of employees working each machine to get weighted minutes. For each container size, the allocated labor and non-labor Bottling costs are combined and compared to the average Bottling costs with the difference between the two amounts being the total Bottling adjustment. The Bottling adjustments for each container size are summed for the Area 1 cross-section Dealers as are the Area 1 sales units; the sum of the adjustment totals is divided by the sum of the Area 1 sales units to derive the Bottling adjustments per Staff Exhibit 10.

The Area 1 sales and units per crate data were used to calculate the adjustment for Cold Room and Delivery. For each Dealer, and for each container size, the Area 1 sales are divided by the applicable 'units per crate' number to determine how many crates were used to handle those containers for the year. The crates for each container are then divided by the total crates for all containers to derive percentages. The percentages are then multiplied by total Cold Room and Delivery costs to determine how much of those

costs are allocated to each container size. For each container size, the allocated Cold Room and Delivery costs are combined and compared to the average Cold Room and Delivery costs with the difference between the two amounts being the total Cold Room and Delivery adjustment. The Cold Room and Delivery adjustments for each container size are summed for the Area 1 cross-section Dealers as are the Area 1 sales units; the sum of the adjustment totals is divided by the sum of the Area 1 sales units to calculate the Cold Room and Delivery adjustments per Staff Exhibit 10.

The Bottling and the Cold Room and Delivery adjustments for each container size are added to derive the total container efficiency adjustments for each container size.

The container efficiency adjustments were last updated in 2007. The methodology used this time was improved with the following changes: actual sales by Area numbers were used instead of weighted Area sales, and the number of employees per machine was used to weight the Bottling labor costs. Using weighted Area sales resulted in certain container sizes being weighted too heavily or lightly in an Area which flawed the adjustments made then; the use of actual sales by Area numbers corrects this problem. And the use of number of employees to weight the Bottling labor costs results in a better allocation of those costs.

Board Staff recommends that the container efficiency adjustment amounts per the existing order be replaced with those per Staff Exhibit 10. Board Staff also recommends that the container efficiency adjustments be updated annually during cost replacement by updating the Area 1 controlled sales units and the 'costs per points' used to calculate the adjustments. Filling speed data and 'units per crate' data would not be updated annually.

### **Staff Exhibit 11**

This Exhibit summarizes the information from the previous Exhibits to arrive at proposed wholesale prices which are shown in Column K.

For Area 1 there are some large variances found in column M in comparing the proposed and current wholesale prices. These variances are mostly attributable to the large increases in the processing costs per point (increased from \$0.3119 for Year 2016 to \$0.3470 for Year 2017 for an increase of \$0.0351 per point) and the cost update adjustment (increased from -\$0.0132 for Year 2016 to +\$0.0065 for Year 2017 for an increase of \$0.0197 per point).

**Staff Exhibit 12**

This Exhibit calculates our proposed retail prices which are shown in Column G.

Thank you. I'd be happy to answer any questions pertaining to my Exhibits.

STAFF SURREBUTTAL TESTIMONY OF GARY GOJSOVICH  
BEFORE THE PENNSYLVANIA MILK MARKETING BOARD  
COST REPLACEMENT HEARING – MILK MARKETING AREA 1  
May 1, 2019

The increase in Area 1 wholesale prices is approximately \$0.24 per gallon which is mostly attributable to the following:

1. The processing costs per point increased by \$0.0351 per point (or \$0.1404 per gallon). We determined that the calculation of points used last year for cost replacement was higher than it should have been. Correcting that for this year accounted for approximately \$0.0250 of the \$0.0351 per point increase (or \$0.1000 of the \$0.1404 per gallon increase).
2. The cost update adjustment increased from -\$0.0132 for Year 2016 to +\$0.0065 for Year 2017 for an increase of \$0.0197 per point (or \$0.0788 per gallon). For Year 2016, when comparing six month periods we saw costs decrease and points increase which resulted in a **negative** adjustment and a price decrease. However, for Year 2017, when comparing six month periods we saw costs and points both decrease which resulted in a **positive** adjustment and a price increase.

Staff Surrebuttal Exhibit 13 shows the impact of these factors on the price of standard (whole) milk in the various container sizes.

The Area 1 cross-section was changed by adding Swiss Premium Dairy. This change did not contribute to the increase in prices.

Thank you. I'd be happy to answer any questions you may have.