

**Prepared Testimony of
Michael L. Brown,
Northwest Dairy Association**

**Re: Class III-IV Pricing
Federal Milk Market Order Hearing
Docket No. A0-14-A77, et al.; DA-07-02**

My name is Michael Brown. I am the Director of Policy and Planning for Northwest Dairy Association, which is usually referred to as "NDA". I am testifying on behalf of NDA. My responsibilities include milk procurement, milk marketing, and representing NDA on milk policy issues relating to pricing and other regulations. Before joining NDA in 2004, I worked as General Manager of National All-Jersey Inc, a dairy producer trade association focused on milk pricing issues for over 10 years.

NDA is a dairy cooperative marketing the milk of approximately 610 dairy farmers in Oregon, California, Idaho and Washington. Approximately 500 of our producer members are part of the Pacific Northwest Federal Milk Marketing Order (Order 124). Approximately 110 Grade A producers are located in the unregulated area of Eastern Oregon and Southern Idaho.

NDA conducts all of its processing and marketing operations through it's subsidiary Darigold, Inc. Darigold operates three Class I processing plants in Order 124 (Seattle, Washington; Portland, Oregon, and Medford, Oregon) and one unregulated Class I plant in Boise, Idaho. Darigold operates four dried milk product plants located at Lynden and Chehalis, Washington, and Caldwell and Jerome, Idaho. Darigold also operates a cheese/whey plant in Sunnyside, Washington, and a Class II/butter plant in Issaquah, Washington. About 80% of our cooperative milk supply is processed through these plants.

NDA believes that Federal Orders need to establish fair, but minimum prices for producer milk used in Class III and IV manufacturing. To do this, USDA must take a view of product yields, product values and manufacturing costs that will allow the Class III and IV prices established by orders to generate milk and milk component prices that reflect the true manufacturing value of milk, but do not create undue hardship to cooperatives or other processors that manufacture the products reflected in the price formulas.

NDA supports consideration of proposals 1, 2, 9, 10, 12, 14 and 17. We believe these proposals offer ways for USDA to improve the current pricing formulas and offer fair but minimum manufacturing milk prices. We oppose proposals 3, 4, 6, 7, 8, 15, and 18. We believe they are too constrictive to meet USDA's obligation to set minimum class pricing under the Federal Order program.

In my three years at NDA, I have had the opportunity to learn about our manufacturing operations, the challenges we face, and the opportunities we have to improve our operations. We believe we do an average or better job in both product yields and quality. But we also struggle with profitability in our manufacturing plants. We believe that USDA must consider NASS price surveys, USDA pricing formulas, and manufacturing allowance surveys must be evaluated together in order to understand how they interact to determine milk prices. USDA must evaluate the limitations of their data in order to successfully use it to generate fair, but minimum milk prices, and not cause undue harm by setting prices for milk that cannot be recovered from the marketplace.

Whey Cream Valuation

Our experience with whey cream sales finds a significant difference in value compared to sweet cream. All cream is generally valued at a multiple of the Butter price. USDA reports multipliers for sweet cream in the *Dairy Market News*. Our Ingredients Division supplied me with the price multiples for whey cream and sweet cream over the past two years. Based on the CME Butter price, we have calculated the comparative values of our whey cream to our sweet cream sales, and the FMMO Class III Butterfat price for this period. The product of this multiplier and the average monthly Chicago Mercantile Exchange Grade AA butter price equals the value of butterfat in these products.

We can concur with other witnesses that consolidation in the butter industry has impacted the prices we receive for our whey cream over the past three years. On a butterfat basis, the difference in value between our whey cream and both sweet cream and Federal Order widened significantly from 2005 to 2006. All of our whey cream sales are FOB our Sunnyside Plant. Our whey cream multiple averaged 36.0% below than our sweet cream multiple during 2005-2007. For the same three year period, the price we received for whey cream on a butterfat basis

averaged 47.4 cents lower than sweet cream, and 24.4 cents below the Federal Order Class III butterfat price. After 2005, the differences became more startling: Our 2006 sweet cream price averaged 56 cents higher than our whey cream sale price, and the 2006 Federal Order Class III Butterfat price was over 29 cents above the whey cream price. These differences make the use of a lower value for whey cream the logical choice for valuing whey cream in the Class III protein formula.

Darigold Whey Cream Value Comparisons
Difference from Sweet Cream and FMMO Class III
Butterfat On a Per-Pound of Butterfat Basis, FOB Plant

	Whey Cream vs., Sweet Cream	Whey Cream vs. FMMO
	Multiple	Class III Butterfat
	Price / #	
2005	-0.2186	-\$0.1560
2006	-0.4578	-\$0.2916
2007	-0.4045	-\$0.2857
3-Year Avg.	-0.3603	-\$0.2444

NASS vs. Actual Plant Product Average Selling Prices.

Product prices are an area where the NASS survey only tells part of the picture. Hard as we try, not all of our product meets the stringent NASS specifications, and we sell products below our NASS reported prices. This means that our average selling prices for all of our products are actually average below the price we report to NASS, due to off-spec product.

We accept that our sales force may not garner prices that are always equal or above to the national NASS average. Particularly with our western location, that is not always possible. However, whether through NASS surveys, make allowances, or yield formulas, USDA currently assumes that all product produced in a plant is sold at the full NASS price. Leaving some room in yield formulas and manufacturing allowances to reflect this reality is necessary to achieve the goal of fair, minimum prices.

Off-spec product can significantly impact the total revenue a plant generates. Darigold's fiscal year 2007 business year ran from April 2006 through March 2007. Out of our entire FY07 cheddar cheese production, 96.02% met the NASS specs to sale at the full grade price. These

cheese sales were reported to NASS. The remaining 3.98% of cheese included under grade cheddar, trims and fines. These products sold for a weighted average price of 21.8 cents *less* per pound than the cheddar meeting NASS reporting specs. The net impact of these off-spec products on our average cheese sale price was 0.9 cents per pound, but since these sales are not reported, NASS does not recognize this difference in average cheese value.

Whey processing also results in off-spec whey. 3.23% of our whey failed to make reportable grade, and was marketed at an average discount of 29-cents per pound to the extra-grade whey market. These sales were not reported to NASS. This feed-grade whey production represented 3.23% of our total whey production, and lowered the average value of all of our whey sales by 0.9 cents, compared the average price for all NASS-reported sales. This difference represents a 2.5% reduction off of our NASS reported price.

About 1.5% of our nonfat dry milk sales were for off-spec product in FY 2007. It sold for an average value of 38.9 cents less than the NFDM sales reportable to NASS, and lowered the average price of all Darigold NFDM sold to by 0.6 cents below our average NASS-reported sale.

While USDA does not use buttermilk yields and pricing in their federal order formulas, they have recognized that sweet cream buttermilk is a by-product of butter manufacturing. The buttermilk yield and value is indirectly represented in the NFDM portion of the yield formulas. When we separate milk in our NFDM plants, about 4.4% of the total skim milk solids end up in our cream, and most of that volume eventually makes it to back to the dryer as buttermilk. There is value here, but in FY2007 our dried sweet cream buttermilk sales averaged 3.63 cents below our average NFDM price reported to NASS.

Cheese and Whey Yields

Manufacturers know that most of the milk components that leave the farm end up in products that a plant can sell at NASS prices, although there are also component losses in all areas of dairy product production from farm to finished product. While we do not document the step-by-step losses, our yields are impacted by this reality.

The cheese yield formula has enjoyed – or perhaps better described as endured - significant discussion at this hearing. There has been both plant information and theoretical speculation on

yields entered into the record. I would like to add to this discussion by talking about our cheese making process at our Sunnyside plant. We make two cheese products in this plant – Cheddar blocks and Monterey Jack. About 90% of our cheese volume is Cheddar.

The Darigold cheddar plant in Sunnyside was opened in 1996 and uses the most modern horizontal vats in its cheese manufacturing operations. During our 2007 fiscal year, we converted 1.28 billion pounds of milk into 130.7 million pound of cheddar cheese, resulting in an average actual yield of 10.22 pounds cheese per cwt with average moisture of 38%. The milk used in the vats contained an average of 3.68% butterfat and 3.05% true protein. The 10.22% cheese yield approximates about a 92% butterfat recovery. In 2007, 96.02% of this cheese was full quality, 3.11% was under grade, 0.56% was trim, and 0.31% was recovered fines. Under the current federal order yield formula, the predicted yield for this milk is $(3.68 \text{ lbs butterfat} * 1.572) + (3.05 \text{ lbs true protein} * 1.383)$, which equals 10.00 lbs cheese. Our actual yields were +0.22 lbs per cwt higher than the FMMO formula yield, reflecting a 2% difference. Keep in mind this is a very modern, efficient plant.

Darigold does use some whey cream in the cheese vat at times, and its use is reflected in the yields above. However, use of whey cream does cause problems as in the manufacturing process. First of all, in our experience, the whey butterfat recovery in the cheese from whey cream is significantly lower than from fresh cream – about 75%, compared to up to 92%. Second, there can be quality problems in cheese when whey cream is used, particularly with soft curds. Third, many customers simply will not allow whey cream to be used in the cheese making procedure, due to quality considerations. These three issues do create significant limitations on how much whey cream can be used in the vat.

At this time, we convert all of our whey solids into dry whey. We also purchase a significant amount of whey solids from another cheese processor in the PNW, which we also convert to whey. This combination of internal and outside whey solids makes it more difficult to accurately pinpoint our whey yields, but we estimate our internal yield at 5.58 lbs whey per cwt. While we are not proud of this yield, it is much less than USDA's assumed yield of 5.86 lbs at reference tests, and again, this is a yield that comes out of a modern plant.

Revenue comparisons from actual yields and product prices.

Combining plant yields and discounts for off-spec products demonstrate how looking at the total picture of product yields, make costs, and product prices must all be carefully considered in total when determining where milk pricing. As hard as we work to maximize production of products that fully meet market specs, some of the product we manufacture is not of the quality required to return the market price.

As discussed above, all of our cheese is not marketed as full grade, despite our best efforts to make quality product. While our cheese production was 2% higher than the FMMO yield formula would indicate, during our FY 2007, the weighted average value of all of our cheddar cheese was 0.7% lower than the price we reported to NASS. Together, these differences resulted in a net value of cheese per cwt that is only 1.4% more than predicted by assuming all USDA cheese yields and all sales sold at NASS. And remember, this is a very modern plant using the latest equipment.

We also do not enjoy the average NASS price for most of our products. We cannot disclose our actual average cheese sales price for competitive reasons but like most western plants, we are selling our cheese at below the weighted average NASS cheddar price, further reducing revenue compared to USDA's "Formula Yield x NASS Price" calculations. In years like this past fiscal year, when barrel prices are higher than blocks for much of the year, our price on reported cheese is even more out-of-line with the weighted average block-barrel price.

We sold our whey cream for an average of 50-cents below our sweet cream on a pound butterfat basis during our FY 2007. Since about 8% of our cheese plant butterfat ends up whey cream, we would derive 14 cents less on a cwt. basis from our cream, compared to a sweet cream sale.

In FY2007, our whey revenue per cwt. milk does not meet USDA's assumptions. As mentioned earlier, our purchase of outside condensed whey makes it more difficult to determine our actual whey yields from our milk, but we believe it is about 5.58 lbs, or 5.0% less than USDA assumes for Federal Orders. As previously mentioned, our average whey product value is 2.13% less. In our plant, our total whey revenue was 7.2% less than would be predicted by USDA's whey formula and our reported sales to NASS.

Again, we would emphasize that this data is from a very large, modern, and efficient plant that produces a quality cheese in high demand.

Manufacturing Cost Studies are not perfect

Manufacturing cost studies, like most business analysis, do rely on some assumptions in order to determine costs. In his testimony from the September 2006 Make Allowance hearing, Dr. Mark Stephenson noted that the 2006 CPDMP study assigns costs based on a solids allocation where no other definition was clear. After further discussion with Dr. Stephenson we discovered that in our powder plants, cream costs were assigned as a percent of the total costs, based on butterfat solids as a percent of total solids.

But in our NFDM plants, cream is simply separated and stored in silos to be sold or moved to our butter churn at a separate location, and count for only a small portion of the total manufacturing cost within our NFDM drying plants. These costs were not transferred to a butter churn as the butter churn is centralized and did not participate in the past survey, due to its complicated nature, and the survey was not made to pick up those costs. By assigning costs to cream-based on the cream percentage of total solids, much higher costs were assigned to cream than could normally be expected. This allocation assumption lowered our NFDM processing costs by about 3.6 cents per pound NFDM, compared to our estimates of actual costs.

Our NFDM production represented 54% of the total product volume represented in the survey. Based the costs that were over-allocated to cream had been assigned to NFDM, corrections to our four plants would have increased the total survey make cost for NFDM by more than 1.9 cents.

In his new survey, Dr. Stephenson will be adjusting his cost allocations to better reflect the structure of our NFDM plants. We also are supplying Dr. Stephenson the butter processing information from our centralized Butter plant. Because this plant is centralized, it is large and efficient. However, we would also like to acknowledge that the movement of cream from our drying plants to this centralized plant does add about 4.2 cents to the processing cost per pound of butter.

Our experience with these surveys show the importance of as much data as possible, including the audited California cost survey data, which is the most meticulously collected data available to the industry. Think of the impact on NFDM makes that would have occurred if the CA data had not been included in the analysis.

We believe our plant experience underlines the need to use conservative yet realistic yields, manufacturing allowances and price levels when developing pricing formulas. We urge USDA to consider our plant experiences as they fine-tune the Federal Order Class III and IV milk price formulas.