

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

|                           |   |                    |
|---------------------------|---|--------------------|
| IN RE:                    | ) |                    |
|                           | ) |                    |
| MILK IN THE NORTHEAST AND | ) |                    |
| OTHER MARKETING AREAS;    | ) | Docket Nos         |
| PROPOSED AMENDMENTS TO    | ) | AO-14-A77, et al.; |
| TENTATIVE MARKETING       | ) | DA-07-02           |
| AGREEMENTS AND ORDERS     | ) |                    |

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LEPRINO FOODS COMPANY'S BRIEF AND PROPOSED FINDINGS AND  
CONCLUSIONS IN REGARDS TO PROPOSALS TO AMEND THE CLASS III AND  
CLASS IV MILK PRICE FORMULAS.

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#### INTRODUCTION AND SUMMARY

Pending before the United States Department of Agriculture ("Department") are proposed amendments to the Class III and Class IV milk price formulas applicable to all Federal Milk Marketing Orders ("Orders"). The hearing on these matters was held February 26 – March 2 in Strongsville, Ohio, April 9 – 13 in Indianapolis, Indiana, and July 9 – 12, 2007 in Pittsburgh, Pennsylvania ("Hearing"). Leprino operates nine plants in the United States, manufacturing mozzarella cheese and whey products domestically and marketing our products both domestically and internationally. Six of the nine plants that Leprino operates in the United States receive milk pooled in the Federal Milk Marketing Orders. Therefore, Leprino has a strong interest in the decision by USDA ("Department") as a result of this hearing. Leprino Foods Company ("Leprino") is submitting this Brief to assist the Department in its analysis of the testimony provided at the Hearing regarding Class III and IV milk pricing.

Evidence presented at the Hearing supports the following conclusions:

I. The Department should adopt:

- A. Proposal 9. This proposal corrects the existing formula assumptions incorporated in the protein component formula regarding the volume and value of whey cream generated in conjunction with cheddar cheese production.
- B. Proposal 12. This proposal corrects the valuation of barrels in the cheese price calculation.
- C. Proposal 1. This proposal updates the make allowances in the current Class III and IV price formulas to reflect the most current and comprehensive cost data available at the time of the hearing. The updated make allowances should be set on an emergency basis through a partial interim decision as follows:
  - i) The make allowance for cheese should be set no lower than 21.54 cents per pound of cheese.
  - ii) The make allowance for dry whey should be set no lower than 20.80 cents per pound of dry whey.
  - iii) The make allowance for butter should be set no lower than 17.25 cents per pound of butter.
  - iv) The make allowance for nonfat dry milk should be set no lower than 17.82 cents per pound of nonfat dry milk.

II. The Department should reject:

- A. Proposal 3. This proposal seeks to reduce the manufacturing allowances using old data that is not properly applied.
- B. Proposals 6, 7, and 8. These proposals increase yield factors based upon suppositions but no record evidence to corroborate that those suppositions are reflective of the preponderance of commercial operations.

Although this brief does not cover the balance of proposals under consideration at this Hearing, Leprino's continues to have an interest in those proposals and our position on the balance of the proposals remains consistent with our testimony at the July 2007 Hearing.

### Whey Cream Volume and Value

The Department should adopt IDFA's proposal 9 which corrects the protein formula to account more accurately for both the volume of fat recovered as whey cream and the value of whey cream. The specifics of this proposal were outlined in detail in my testimony submitted to USDA on March 30, 2007 and posted on the USDA website in advance of the Indianapolis hearing ([http://www.ams.usda.gov/dairy/class\\_III\\_IV\\_pr\\_formulas/rec\\_st/Leprino\\_Foods.pdf](http://www.ams.usda.gov/dairy/class_III_IV_pr_formulas/rec_st/Leprino_Foods.pdf)) and remained unchanged in my final testimony submitted June 22, 2007 (Hearing Exh 69). All hearing participants had over three months time to evaluate and respond to the specific proposal, a point that was acknowledged by the attorney for DFA and Dairylea. (colloquy between Mr. Rosenbaum and Mr. Beshore Tr2886-7).

Volume. The record is replete with evidence that the assumption reflected in the existing formula that all fat not captured in the cheddar cheese is captured in a marketable form (in this case, grade AA butter) is in error. Specifically, milk components are lost at start-up and shut-down (Tr 2441). Fat is also lost through the process in the form of whey drippings from wooden boxes (Tr 2444), salt whey (Tr 2443), separator desludge (Tr 2446) and other product losses. Fat also adheres to the equipment and is only removed through the aggressive use of chemicals during the daily clean in place ("CIP") cycles or through manual cleaning protocols (Tr 2447). Additionally, even in the best managed system, it is inevitable that from time to time some product will contact a surface that results in it being removed from the human grade marketing chain. This is particularly true if a piece of equipment malfunctions, causing the balance of the production system to stop while that equipment malfunction is addressed. While good manufacturing and preventative maintenance practices can minimize these instances of product losses, these events cannot be entirely eliminated. The magnitude of the component loss, of course, is significant when cheese curds that may be 32% fat and 24% casein become ineligible for human use (Tr 2447). The precise level of most of

these loss areas has not been quantified in literature or research, particularly as they relate to commercial operations. However, based upon those areas of disposition that are quantified, the maximum fat that should be assumed to be recovered in whey cream in conjunction with the 90% fat recovery assumption in cheddar cheese is 7.8% of the original fat. Therefore, in this example, the 0.9 factor should be replaced by a factor of 0.922 or greater in the protein equation, leaving a maximum of 7.8% of the fat to be valued as whey cream (Tr 2467).

Value. Extensive record evidence exists that whey cream is typically sold by cheddar manufacturers. Agrimark (Tr 857), Twin County Dairy (Tr 1411), Foremost Farms (Tr 1542), Davisco (Tr 1570), Great Lakes Cheese (Tr 1919), and Land O' Lakes (Tr 2115), Kraft (Tr 1102) Sommer (Tr 2350) all testified to that effect. The fat that is delivered to the vat but is not captured in the cheddar is currently valued in the Class III formula as if it produced grade AA butter. However, upon separation from the skim whey, the whey fat is contained in a product referred to as whey cream. USDA's quality standards prohibit whey cream from being used to produce USDA Grade AA butter; rather, it can only be used to produce Grade B butter (Tr 2456).

Whey cream is sold at a significant discount and manufacturers in many parts of the country do not even recover the regulated cost of the fat when selling whey cream. The prices received by manufacturers for whey cream vary considerably by region due to the regional competitive environment and distance to whey cream outlets. At the time that I developed my Hearing testimony, I based my valuation of the whey cream on data from the Pacific Northwest that showed that the whey cream prices averaged 94.4% of the grade AA market. This pricing level translates in the need to add a factor reducing the fat value adjustment portion of the protein price by \$0.016. Specifically, the 0.016 factor would be placed within the protein formula as follows: protein price per pound =  $1.383 \times (\text{NASS cheese price} - \text{make allowance}) + [1.572 \times (\text{NASS cheese price} - \text{make allowance}) - (0.922 \times \text{Fat Component Price}) - \$0.016] \times 1.17$ .

The Northwest Dairy Association (“NDA”) witness testified at the Hearing that their average whey cream sales price during 2005 – 2006 was 94.4% of the grade AA butter market. (Tr.2912). Additionally, the witness elaborated that the average would drop to 89.2% if 2007 data were included (TR 2912). Assuming that the witness used a simple average of the three-year annual averages to arrive at the 89.2% number, it can be deduced that the 2007 average sale price for whey cream was 78.8%. The following table shows the shortfall from the regulated Class III fat price that results from selling whey cream at these respective price levels. This analysis uses the same methodology as was included in my testimony presented at the hearing and is simply an update using the new evidence revealed at the hearing.

|                                                                                                             | 2005 –<br>2007<br>Average<br>Multiplier | 2007<br>Average<br>Multiplier |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------|
| Average Grade AA butter price (02 – 06)<br>Multiplier                                                       | \$1.3592<br>89.2%                       | \$1.3592<br>78.7%             |
| Return per pound whey fat                                                                                   | \$1.2124                                | \$1.0710                      |
| Regulated cost per pound fat (current formula, Grade AA price<br>minus 12.02 cent make allowance times 1.2) | \$1.4868                                | \$1.4868                      |
| Revenue less cost per pound fat                                                                             | (\$0.2744)                              | (\$0.4158)                    |
| Pounds fat recovered in whey cream                                                                          | 0.2715                                  | 0.2715                        |
| Revenue less regulated fat cost per cwt milk                                                                | (\$0.0745)                              | (\$0.1129)                    |
| Adjustment factor within protein formula                                                                    | (\$0.0213)                              | (\$0.0323)                    |

To equate this overvaluation at the hundredweight level to the correct adjustment factor within the fat correction portion of the protein formula, the hundredweight adjustment is divided by 3.5 [1.17 x (3.1 pounds protein per cwt skim) x (96.5 pounds skim per cwt

milk at standard)). Based upon the three year average, therefore, the adjustment factor within the protein formula should be - \$0.021 as follows: protein price per pound =  $1.383 \times (\text{NASS cheese price} - \text{make allowance}) + [1.572 \times (\text{NASS cheese price} - \text{make allowance}) - (0.922 \times \text{Fat Component Price}) - \$0.021] \times 1.17$ . The adjuster based upon the 2007 average whey cream price would be - \$0.0323. At a minimum, a whey fat value adjuster of \$0.0213 representing the three-year average return should be added to the protein formula.

Given this evidence, the Department should adopt a protein formula as follows:

$1.383 \times (\text{NASS cheese price} - \text{make allowance}) + [1.572 \times (\text{NASS cheese price} - \text{make allowance}) - (0.922 \times \text{Fat Component Price}) - \$0.021] \times 1.17$

The formula adjustment represents a conservative change. The proposed change does not account for the fat lost on the stainless piping and equipment from pasteurizer through the vat, draining, cheddaring, milling, and pressing, or the losses related to product losses. In other words, the formula will still require processors to pay for milk as if they had not suffered these losses, but were instead able to extract revenues from the marketplace for this fat.

#### Barrel Adjuster in Calculation of Cheese Price

USDA should also adopt Proposal 12, IDFA's proposal to eliminate the 3 cents that is currently added to the barrel price before calculating the weighted average NASS cheese price used in the Class III formula. Under the current pricing formulas and make allowances, this 3 cents addition cannot be justified.

The three-cent addition to the barrel price prior to calculating the cheese price under the current price formulas is not based upon a study of actual cost differences between blocks and barrels. Rather, it is based upon what was "generally considered to be the industry standard cost difference between processing barrel cheese and processing

block cheese” (Tr 2474 - - Fed. Reg. Vol. 64 No. 63 Page 16098). The three-cent rule of thumb was accepted by the industry as the cost difference because it had been manifested in the marketplace as the long-term difference in prices between 40# blocks and 500# barrels at 39% moisture. However, subsequent to the implementation under Federal Order Reform, USDA adopted in the Tentative Rule implemented January 2001 a change in the pricing reference used for barrel cheese from the 39% moisture price that set the framework for the three cent adjustment to a 38% moisture adjusted price. This change in the moisture level at which barrel prices are quoted has increased the barrel cheese price by 2.2 cents per pound during the last five years. Thus, the three-cent adjustment and the adjustment of the barrel price to a 38% price reference both capture the same facet of the relationship between blocks and barrels, and are duplicative and double counting.

Additionally, the record evidence with respect to block and barrel production costs showed no difference in cost between the production of cheddar blocks and barrels (Tr 1562). The Davisco plant is of particular significance because it has comparable capacity in both forms, with capital investments to both lines made in a comparable timeframe.

#### Make Allowances

The record evidence supports the adoption of updated make allowances to reflect the most current and comprehensive cost data available at the time of the hearing. The updated make allowances should be set on an emergency basis through a partial interim decision as follows:

- i) The make allowance for cheese should be set no lower than 21.54 cents per pound of cheese.
- ii) The make allowance for dry whey should be set no lower than 20.80 cents per pound of dry whey.
- iii) The make allowance for butter should be set no lower than 17.25 cents per

pound of butter.

iv) The make allowance for nonfat dry milk should be set no lower than 17.82 cents per pound of nonfat dry milk.

IDFA's post-hearing brief provides further elaboration on the record evidence supporting these make allowances. The elaboration and justification for these make allowances is well reasoned and we support those arguments and conclusions.

#### Yield Proposals by Dairy Producers of New Mexico

The Department should not adopt Proposals 6, 7, and 8, which were not supported by objective evidence in the Hearing record. These proposals all increase the yield factors in the Class III and IV formulas based upon assumptions that do not comport with the minimum regulated pricing and manufacturing realities.

The erroneous assumptions that have been used by the proponents of the proposals are that:

- ◆ Structural changes in the farm sector have eliminated the need to accommodate farm-to-plant losses when determining yields
- ◆ 94% of the fat is captured in the finished cheddar cheese
- ◆ Casein represents 83.25% of true protein

Eliminating the farm to plant shrink allowance is in direct conflict with the combination of three basic facts. They are (1) the Orders set minimum prices for milk as measured at the farm, (2) shrink occurs between the farm and delivery to the milk silos at the manufacturing plants, and (3) the VanSlyke yield formula used as the basis for setting the yield factors is designed to estimate the cheddar yield based upon components present in a cheese vat. In other words, the VanSlyke formula does not account for the losses of components that occur in the collection, transport, and delivery of milk between the farm and plant. Therefore, further adjustments must be made to

accommodate losses that occur prior to the vat when pricing milk at the farm.

The losses of milk volume and components that occur between the farm bulk tank and the plant have been well documented in this hearing already. MMPA testified that their losses average around 0.3% (Tr 469). Land O' Lakes experienced 0.343 farm to plant loss by volume and 0.511 farm to plant loss on the fat component in 2006 (Tr 2155).

The proponents of increasing the fat capture factor from 90 to 94% have provided no supporting evidence. Rather, the proponents provided hypothetical examples as to what the monetary impacts would be if a plant were to be able to achieve 94% fat capture. Such hypotheticals do not prove that their underlying assumptions are realistic or achievable.

In contrast, expert witness Dean Sommer was very clear that 90% remains an appropriate fat capture assumption. He testified that extensive multi-year studies conducted at the Alto Black Creek and Waupun plants showed fat captures ranging seasonally from 89 to 91% (Tr 2339). He was also able to rely upon his extensive exposure to other plant operations given his current position as a Cheese and Food Technologist at the University of Wisconsin Center for Dairy Research. He elaborated that it is important to measure the fat in the finished cheese, as opposed to assuming that all of the fat that is not in the whey at draw is in the finished cheese. The sources of losses outside of the vat include the milk silos (Tr 2340), clarifiers (Tr 2341), start-up / change-overs / shut down (Tr. 2341), cheese fines (Tr. 2342), salt whey (Tr 2344), and equipment surfaces (Tr 2344).

Mr. Sommer's conclusion that 90% remains an appropriate assumption for the percentage of fat captures in the cheese (Tr 2339) was confirmed by the testimony of cheddar plant operators regarding their own operating experiences, including Timothy Greenway, Foremost Marshfield, 90.25% (Tr 1528); Dennis Shad, Land O'Lakes, Kiel,

(Hearing Exh. 55 pp. 3-4).

The record does not support the increase in the protein yield factor from 1.383 to 1.405. This proposal is erroneously premised on an argument that the percentage of casein in true protein in milk is 83.25%. However, the 83.25% suggested by the proponents is not based upon actual tests of casein levels in raw milk. Rather it is an estimate based upon several rules of thumb, each of which is inaccurate and introduces additional errors. Obviously, the best way to determine the proper assumption for the percentage of casein in true protein in milk is to measure it. Several University studies of this matter have been completed over the years by experts in milk chemistry, and they provided the basis for the current formulas, which are based upon the percentage of casein in true protein being 82.2%. There is no reason whatsoever to change that number.

Respectfully submitted,

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