THE MILK PRICES REVIEW ACT
(C.C.S.M. c. M130)

Producer Price and Milk Cost of Production Order, amendment

Regulation 21/2007
Registered February 19, 2007

Manitoba Regulation 77/94 amended
1 The Producer Price and Milk Cost of Production Order, Manitoba Regulation 77/94, is amended by this regulation.

2 Subsection 4(1) is repealed and the following is substituted:

Price of fluid milk sold by producer or board
4(1) Pursuant to subsection 3(3) of the Act, and based on the cost of production formula established in section 2 and the pricing system established in section 3, the price at which milk may be sold by a producer or the board for use as fluid milk for 1 hectolitre of milk testing 3.7034 kilograms of butterfat is $77.00 calculated according to the following component quantities and unit values:

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity (kg)</th>
<th>Unit Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butterfat</td>
<td>3.7034</td>
<td>@ $5.3000/kilogram</td>
<td>$19.63</td>
</tr>
<tr>
<td>Protein</td>
<td>3.4092</td>
<td>@ $6.2354/kilogram</td>
<td>21.26</td>
</tr>
<tr>
<td>Other Solids</td>
<td>5.7921</td>
<td>@ $6.2354/kilogram</td>
<td>36.11</td>
</tr>
<tr>
<td><strong>Total Price</strong></td>
<td></td>
<td></td>
<td><strong>$77.00</strong></td>
</tr>
</tbody>
</table>

3 Clause 8(a) is amended by striking out "$70.79" and substituting "$73.15".

4 The Schedule is repealed and the Schedule to this order is substituted.
Coming into force
5 This order comes into force on March 1, 2007.

February 19, 2007 MANITOBA MILK PRICES REVIEW
COMMISSION:

Craig Lee
Chairperson

Randy Ozunko
Secretary
SCHEDULE

COST OF PRODUCTION FORMULA

Pursuant to subsection 3(2) of The Milk Prices Review Act, the Manitoba Milk Prices Review Commission hereby establishes a cost of production formula. It reflects the cost of producing milk for use as fluid milk in Manitoba and includes a reasonable return on investment to the producers of milk. Under this formula, the cost of producing fluid milk is determined by the sum of the various cost categories, the analysis of which follows the formula. Each cost category is reported on the basis of production from a typical dairy farm with a herd size of 59 head and an average productivity of 59 hectolitres of milk per cow, or 3,481 hectolitres of marketable production per farm. Total volume actually marketed through the Manitoba Milk Producer Marketing Board is 57 hectolitres per cow, or 3,363 hectolitres per farm.

COST OF PRODUCTION FORMULA

February 8, 2007 costs per hectolitre

1. Operating Expenses $57,433
2. Feed and Bedding 66,912
3. Direct Labour 75,956
4. Management Fee 6,371
5. Herd Replacement 19,239
6. Depreciation 12,475
7. Return on Equity 7,480
   Interest on Debt 6,837

Sub-Total, On-Farm Costs $252,703

Total volume of marketable milk per farm 3,481 hl

Total on-farm costs, per hectolitre produced $72.59

8. Transportation $7,510
9. & 10. Adjusted Fluid Requirement 1,727
11. Market Expansion Fee 5,243
12. Fluid Skim-Off Costs 342

Sub-total, Off-Farm Costs $14,822

Total volume of milk marketed per farm 3,363 hl

Total off-farm costs, per hectolitre marketed $4.41

Total cost of fluid milk production, per hectolitre $77.00
1. **Operating Expenses**

<table>
<thead>
<tr>
<th></th>
<th>1989 Survey</th>
<th>July 28, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>$13,250</td>
<td>$21,891</td>
</tr>
<tr>
<td>Fuel and Lubricants</td>
<td>1,431</td>
<td>2,868</td>
</tr>
<tr>
<td>Livestock Supplies and Services</td>
<td>3,119</td>
<td>5,460</td>
</tr>
<tr>
<td>Veterinary and Medicine</td>
<td>2,730</td>
<td>6,064</td>
</tr>
<tr>
<td>Custom Work</td>
<td>2,804</td>
<td>4,465</td>
</tr>
<tr>
<td>Land and Building Taxes</td>
<td>920 (1)</td>
<td>1,405</td>
</tr>
<tr>
<td>Repairs and Maintenance — Buildings</td>
<td>2,360</td>
<td>3,159</td>
</tr>
<tr>
<td>Repairs and Maintenance — Equipment</td>
<td>4,097</td>
<td>7,116</td>
</tr>
<tr>
<td>Repairs and Maintenance — Supplies</td>
<td>994</td>
<td>1,010</td>
</tr>
<tr>
<td>Board Administration</td>
<td>1,511 (2)</td>
<td>3,995</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td><strong>$33,216</strong></td>
<td><strong>$57,433</strong></td>
</tr>
</tbody>
</table>

Sources: Manitoba Milk Producers' Marketing Board, *Cost of Milk Production Study (Provincial Parameters)*, 1989 and 1991


1. 1991 survey value, to reflect re-assessment of farm properties
2. 1991 levy rates, applied to 3,481 hectolitres

2. **Feed and Bedding**

<table>
<thead>
<tr>
<th></th>
<th>Quantity Per Cow</th>
<th>Price</th>
<th>Cost Per Cow</th>
<th>Blended Cost Per Farm (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produced Hay</td>
<td>5.48 t</td>
<td>$86.26</td>
<td>$472.70</td>
<td>$27,889</td>
</tr>
<tr>
<td>Purchased Hay</td>
<td>.49 t</td>
<td>106.26</td>
<td>52.07</td>
<td>3,072</td>
</tr>
<tr>
<td>Produced Straw</td>
<td>.93 t</td>
<td>44.08</td>
<td>40.99</td>
<td>2,419</td>
</tr>
<tr>
<td>Purchased Straw</td>
<td>.07 t</td>
<td>69.08</td>
<td>4.84</td>
<td>286</td>
</tr>
<tr>
<td>Produced Barley</td>
<td>.51 t</td>
<td>120.69</td>
<td>61.55</td>
<td>2,433 (2)</td>
</tr>
<tr>
<td>Purchased Barley</td>
<td>1.81 t</td>
<td>145.69</td>
<td>263.70</td>
<td>10,424 (2)</td>
</tr>
<tr>
<td>35% Supplement</td>
<td>.47 t</td>
<td>367.10</td>
<td>172.54</td>
<td>6,820 (2)</td>
</tr>
<tr>
<td>16% Ration</td>
<td>2.73 t</td>
<td>245.10</td>
<td>669.12</td>
<td>13,028 (3)</td>
</tr>
<tr>
<td>Salt</td>
<td>3.53 kg</td>
<td>.31</td>
<td>1.09</td>
<td>43 (2)</td>
</tr>
<tr>
<td>Minerals</td>
<td>13.00 kg</td>
<td>.90</td>
<td>11.70</td>
<td>462 (2)</td>
</tr>
<tr>
<td>Vitamins</td>
<td>.60 kg</td>
<td>1.53</td>
<td>.92</td>
<td>36 (2)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>$1,751.22</td>
<td>$66,912</td>
</tr>
</tbody>
</table>
(1) An average of 59 cows were on the representative dairy farm.
(2) Sixty-seven percent of the farms mixed their own rations. Therefore the cost
for the average farm was the cost per cow times 59 cows multiplied by 67
percent.
(3) Thirty-three percent of the farms purchased pre-mixed rations. Therefore, the
cost to the average business was the per cow expenditure times 59 cows
multiplied by 33 percent.

The blended cost consists of 67% of the cows fed on ration mixed on the farm, which
is made up of barley, 35% supplement, salt, minerals and vitamins: while 33% of the
cows received a complete ration (16% Dairy Ration).

Sources: Feed Quantities — Model ration established by Manitoba Agriculture,
Food and Rural Initiatives
Hay Price — export basis, Manitoba, for six month period ending
January, 2007
Straw Prices — Survey conducted by Manitoba Agriculture, Food and
Rural Initiatives
Barley Price — Adjusted average price received by Manitoba farmers,
December, 2006
Commercial Feeds and Supplements — Survey conducted by Manitoba
Agriculture, Food and Rural Initiatives
Proportions of purchased hay, barley and straw — Manitoba Milk
Producers' Marketing Board, Cost of Milk Production Study, 1991
Transportation Rates — Survey conducted by Manitoba Agriculture, Food
and Rural Initiatives, and Cost of Milk Production Study, 1991

3. **Direct Labour**

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family labour</td>
<td>3,540</td>
<td>$17.00/hour</td>
<td>$60,188</td>
</tr>
<tr>
<td>Hired labour</td>
<td>1,180</td>
<td>$13.36/hour</td>
<td>15,768</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,720</td>
<td></td>
<td><strong>$75,956</strong></td>
</tr>
</tbody>
</table>

Sources: Manitoba Milk Producers’ Marketing Board, Cost of Milk Production
Study, 1989
Petkau, D.R., A Study to Review and Improve the Milk Prices Review
Commission's Producer Cost of Production Formula for Fluid Milk,
June, 1991
Statistics Canada, 72-002, Employment, Earnings and Hours, Manitoba
Industrial Aggregate Wage — Average Hourly Earnings, including
Overtime, December, 2006

4. **Management Fee**

2% of total undepreciated dairy assets, ($318,558)  $6,371
including the dairy herd
5. **Herd Replacement**

**ANNUAL COST**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Heifers (31.7% of average herd):</td>
<td>$34,694</td>
</tr>
<tr>
<td>19 head @ $1,826.00</td>
<td></td>
</tr>
<tr>
<td>Less: Sale of Culls (assuming 3 deaths):</td>
<td>(5,347)</td>
</tr>
<tr>
<td>16 head @ $334.20</td>
<td></td>
</tr>
<tr>
<td>Less: Sale of Calves</td>
<td></td>
</tr>
<tr>
<td>26 Bull calves @ $135.94</td>
<td>(3,534)</td>
</tr>
<tr>
<td>24 heifer calves @ $273.90</td>
<td>(6,574)</td>
</tr>
<tr>
<td>Net herd replacement cost per year</td>
<td>19,239</td>
</tr>
</tbody>
</table>

Sources: Average herd size and replacement rates — Manitoba Milk Producers' Marketing Board, *Cost of Milk Production Study, 1989*

Heifer and Cull Price, base — Manitoba Milk Producers' Marketing Board, *Cost of Milk Production Study, 1991*


Cows, Manitoba Average Monthly Price, to December, 2006

Calves, quantity — Manitoba Milk Prices Review Commission

Bull Calf Price, base — Manitoba Milk Producers' Marketing Board, *Cost of Milk Production Study, 1991*

Heifer Calf Price, Base — 15% of replacement heifer cost


6. **Depreciation**

Depreciation allowance for dairy assets (buildings, equipment and vehicles) $293,188 @ 4.26% $12,475

Source: Manitoba Milk Producers' Marketing Board, *Cost of Milk Production Study, 1989*
7. **Return on Equity/Interest on Debt**

**ANNUAL COST**

<table>
<thead>
<tr>
<th></th>
<th>ANNUAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-Term Debt</td>
<td>$ 12,415 @ 7.50%</td>
</tr>
<tr>
<td>Long-Term Debt</td>
<td>75,598 @ 7.81%</td>
</tr>
<tr>
<td>Unfinanced Assets</td>
<td>156,521 @ 4.78%</td>
</tr>
<tr>
<td><strong>Total Return on Assets</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bank of Canada Review
- Short-Term Debt — B14020, Chartered Bank Prime Business Rate (plus 1½%), December, 2006
- Long-Term Debt — B14051, Chartered Bank 5-year Conventional Mortgage Rate, 60-month average to December, 2006
- Unfinanced Assets — B14047, Provincial Weighted Average Long-Term Bond Yield, 12-month average to December, 2006

8. **Transportation**

Annual cost of transporting milk to processing plants $7,510
3,363 hl @ $2.23/hl

Source: Manitoba Milk Producers' Marketing Board, Transportation costs, 12-month average to October, 2006

9. **Adjusted Fluid Requirement**

This factor compensates producers for the value of additional milk required due to transportation shrinkage, fluid skim-off and shrinkage loss in processing.

Actual Fluid Sales $70,886,434

Add: Actual skim-off sold as Class 1b, 2 and 4a milk 17,807,207

Add: Actual Plant Loss (Class 4d) 787,264

Class 1 actual value of fluid revenue generated based on annual sales of 108.05 million litres $89,480,905

Less: Class 1 projected Value of Fluid revenue based on COP and on annual sales of 108.05 million litres (89,099,323)
Less: Butterfat Credit \( (680,819) \)

Adjusted Revenue Overage (shortfall) \( ($299,237) \)

Add: Applicable federal subsidy @ $0.21 per kg of butterfat on Class 4a sales (eliminated) \( 0 \)

Net Adjusted Revenue, Overage (shortfall) \( ($299,237) \)

Divided by Total Fluid Sales (1,080,542 hl) \( $2.769/\text{hl} \)

Multiplied by Fluid Sales per Farm (3,363 hl) \( $931 \) per farm

Sources: Volumes of skim-off and industrial prices — Manitoba Milk Producers’ Marketing Board and Manitoba Milk Prices Review Commission
Current Class 1 value — Manitoba Milk Prices Review Commission
Allocation of skim-off to end-product utilization — Manitoba Milk Prices Review Commission survey of fluid milk processors

10. **Metre Shrink**

Transportation Shrinkage (%) \( .0029 \)

Total fluid milk used for processing \( \times 1,148,607 \) hl

Transportation Shrinkage \( 3,331 \) hl

Total cost of fluid production \( \times 877.00 \)

Transportation Shrinkage ($) \( $256,487 \)

Divided by Total Fluid Milk Sales \( $108,054.278 \)

\( $0.237/\text{hl} \)

Fluid sales per farm \( \times 3,363 \) hl

Transportation shrinkage per farm \( $796 \)

Adjusted fluid requirement per farm (add) \( $931 \)

Total adjusted fluid requirement \( $1,727 \)

Sources: Volumes of shrinkage and milk processed — Manitoba Milk Producers’ Marketing Board and Manitoba Milk Prices Review Commission
11. **Market Expansion Fee**

Annual cost of fluid milk promotion programs $5,243
3,363 hl @ $1.56/hl

Source: Manitoba Milk Producers' Marketing Board

12. **Fluid Skim-Off Costs**

This factor provides for net costs related to handling of butter produced from fluid skim-off. Values on summary page assume all skim-off costs are a cost to fluid sales.

Manitoba fluid share of Canadian butter production costs 3.49%
1996-97 Canadian butter management costs $3,150,126
Manitoba fluid skim-off share of costs $109,939
Fluid skim-off costs per hl $0.102
Fluid skim-off costs per farm, annually $342

Sources: Canadian Dairy Commission, 1996-97 Annual Report