

Producer Price and Milk Cost of Production Order, amendment

Regulation 107/2004
Registered June 14, 2004

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2 **Subsection 4(1) is repealed and the following substituted:**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 \$76.79 calculated according to the following component quantities and unit values:

Butterfat	3.7034 kilograms @ \$5.3000/kilogram	= \$19.63
Protein	3.4092 kilograms @ \$6.2114/kilogram	= 21.18
Other Solids	5.7921 kilograms @ \$6.2114/kilogram	= 35.98
Total Price		<u>\$76.79</u>

3 **Clause 8(a) is amended by striking out "\$73.94" and substituting "\$72.95".**

4 **The Schedule is repealed and the Schedule to this order is substituted.**

Coming into force

5 This order comes into force on July 1, 2004.

June 11, 2004

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

June 4, 2004 costs per hectolitre

1.	Operating Expenses	\$52,663
2.	Feed and Bedding	74,503
3.	Direct Labour	69,452
4.	Management Fee	6,371
5.	Herd Replacement	21,873
6.	Depreciation	12,475
7.	Return on Equity	8,936
	Interest on Debt	6,153

Sub-Total, On-Farm Costs \$252,426

Total volume of marketable milk per farm 3,481 hl

Total on-farm costs, per hectolitre produced \$72.52

8.	Transportation	\$7,463
9. & 10.	Adjusted Fluid Requirement	1,699
11.	Market Expansion Fee	4,841
12.	Fluid Skim-Off Costs	<u>342</u>

Sub-total, Off-Farm Costs \$14,345

Total volume of milk marketed per farm 3,363 hl

Total off-farm costs, per hectolitre marketed \$4.27

Total cost of fluid milk production, per hectolitre \$76.79

1. Operating Expenses

	1989 SURVEY		JUNE 4, 2004
Administration	\$13,250		\$21,197
Fuel and Lubricants	1,431		1,906
Livestock Supplies and Services	3,119		4,999
Veterinary and Medicine	2,730		4,730
Custom Work	2,804		4,130
Land and Building Taxes	920	(1)	1,252
Repairs and Maintenance — Buildings	2,360		2,862
Repairs and Maintenance — Equipment	4,097		6,524
Repairs and Maintenance — Supplies	994		1,069
Board Administration	1,511	(2)	3,995
TOTAL OPERATING EXPENSES	\$33,216		\$52,663

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

Statistics Canada, 62-004, Farm Input Price Index, First Quarter, 2004

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

2. Feed and Bedding

	QUANTITY PER COW	PRICE	COST PER COW	BLENDED COST PER FARM (1)
Produced Hay	5.48 t	\$ 111.28	\$ 609.81	\$ 35,979
Purchased Hay	.49 t	131.25	64.31	3,795
Produced Straw	.93 t	44.08	40.99	2,419
Purchased Straw	.07 t	74.87	5.24	309
Produced Barley	.51 t	96.88	49.41	1,953 (2)
Purchased Barley	1.81 t	121.88	220.60	8,720 (2)
35% Supplement	.47 t	439.20	206.42	8,160 (2)
16% Ration	2.73 t	238.60	651.38	12,682 (3)
Salt	3.53kg	.30	1.06	42 (2)
Minerals	13.00kg	.79	10.27	406 (2)
Vitamins	.60kg	1.57	.94	37 (2)

TOTAL

\$1,860.43

\$74,503

- (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
 Hay Price — export basis, Manitoba, for six month period ending March, 2004
 Straw Prices — Survey conducted by Manitoba Agriculture
 Barley Price — Adjusted average price received by Manitoba farmers, May, 2004
 Commercial Feeds and Supplements — Survey conducted by Manitoba Agriculture
 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, and Cost of Milk Production Study, 1991

3. Direct Labour

Family labour	3,540 hours @ \$15.55/hour	\$55,034
Hired labour	1,180 hours @ \$12.22/hour	14,418
Total direct labour	4,720 hours	<u>\$69,452</u>

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, 2003

4. Management Fee

2% of total undepreciated dairy assets, (\$318,558) including the dairy herd	\$6,371
--	---------

Source: Manitoba Milk Producers' Marketing Board, Cost of Milk Production Study, 1989

5. Herd Replacement

	ANNUAL COST
Replacement Heifers (31.7% of average herd): 19 head @ \$1,826.00	\$34,694
Less: Sale of Culls (assuming 3 deaths): 16 head @ \$219.18	(3,507)
Less: Sale of Calves 26 Bull calves @ \$105.42 24 heifer calves @ \$273.90	(2,741) (6,574)
Net herd replacement cost per year	\$21,873

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
Heifer and Cull Cow Price, Index — Manitoba, Agriculture, Program and Policy Analysis Manitoba Markets, D3 Cows, Manitoba Average Monthly Price, to April, 2004
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
Bull Calf Prices, index — Agriculture Canada, Canada Livestock and Meat Trade Report, under 400 lb. steer calves, Manitoba Average Monthly Price, to April, 2004 (adjusted to a basis of 1997/1998 calf prices)

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
Short-Term Debt	\$ 12,415 @ 5.25%	\$ 652
Long-Term Debt	75,598 @ 7.28%	5,501
Unfinanced Assets	156,521 @ 5.71%	8,936
Total Return on Assets		<u>\$15,089</u>

Source: Bank of Canada Review
 Short-Term Debt — B14020, Chartered Bank Prime Business Rate
 (plus 1½%), May, 2004
 Long-Term Debt — B14051, Chartered Bank 5-year Conventional
 Mortgage Rate, 60-month average to May, 2004
 Unfinanced Assets — B14047, Provincial Weighted Average
 Long-Term Bond Yield, 12-month average to December, 2003

8. Transportation

Annual cost of transporting milk to processing plants	<u>\$7,463</u>
3,363 hl @ \$2.22/hl	

Source: Manitoba Milk Producers' Marketing Board, Transportation costs,
 12-month average to May, 2004

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	\$70,747,809
Add: Actual skim-off sold as Class 1b, 2 and 4a milk	17,666,405
Add: Actual Plant Loss (Class 4d)	<u>786,939</u>
 Class 1 actual value of fluid revenue generated based on annual sales of 108.05 million litres	 \$89,201,153
Less: Class 1 projected Value of Fluid revenue based on COP and on annual sales of 108.05 million litres	(88,811,657)
Less: Butterfat Credit	<u>(680,511)</u>
Adjusted Revenue Overage (shortfall)	(\$291,015)
Add: Applicable federal subsidy @ \$0.21 per kg of butterfat on Class 4a sales (eliminated)	<u>0</u>
 Net Adjusted Revenue, Overage (shortfall)	 (\$291,015)
Divided by Total Fluid Sales (1,080,542 hl)	\$.2693/hl
Multiplied by Fluid Sales per Farm (3,363 hl)	\$906 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	<u>x 1,144,186 hl</u>
Transportation Shrinkage	3,318 hl
Total cost of fluid production	<u>x \$76.79</u>
Transportation Shrinkage (\$)	\$254,789
Divided by Total Fluid Milk Sales	<u>\$108,054,278</u>
	\$0.236/hl
Fluid sales per farm	<u>x 3,363 hl</u>
Transportation shrinkage per farm	\$793
Adjusted fluid requirement per farm (add)	<u>\$906</u>
Total adjusted fluid requirement	\$1,699

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	<u>\$4,841</u>
3,363 hl @ \$1.44/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	<u>\$342</u>

Sources: Canadian Dairy Commission, 1996-97 Annual Report