

Producer Price and Milk Cost of Production Order, amendment

Regulation 154/2002
Registered September 23, 2002

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2 Subsection 4(1) is repealed and the following substituted: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 \$73.30, calculated according to the following component quantities and unit values:

Butterfat	3.7034 kilograms @ \$5.3000/kilogram	= \$19.63
Protein	3.3416 kilograms @ \$5.9201/kilogram	= 19.78
Other Solids	5.7241 kilograms @ \$5.9201/kilogram	= 33.89
Total Price		<u>\$73.30</u>

3 Clause 8(a) is amended by striking out "\$68.12" and substituting "\$69.64".

4 The Schedule is repealed and the Schedule to this order is substituted.

Coming into force

5 This order comes into force on October 1, 2002.

September 12, 2002

MANITOBA MILK PRICES REVIEW
COMMISSION:

Daryl F. Kraft
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

September 5, 2002 costs per hectolitre

1.	Operating Expenses	\$47,341	
2.	Feed and Bedding	75,665	
3.	Direct Labour	67,131	
4.	Management Fee	6,365	
5.	Herd Replacement	11,623	
6.	Depreciation	12,475	
7.	Return on Equity	9,853	
	Interest on Debt	6,778	
	Sub-Total, On-Farm Costs	\$237,231	
	Total volume of marketable milk per farm	3,481 hl	
	Total on-farm costs, per hectolitre produced		\$68.15
8.	Transportation	\$7,222	
9. & 10.	Adjusted Fluid Requirement	5,051	
11.	Market Expansion Fee	4,684	
12.	Fluid Skim-Off Costs	<u>353</u>	
	Sub-total, Off-Farm Costs	\$17,310	
	Total volume of milk marketed per farm	3,363 hl	
	Total off-farm costs, per hectolitre marketed		\$5.15
	Total cost of fluid milk production, per hectolitre		<u>\$73.30</u>

1. Operating Expenses

	1989 SURVEY		SEPTEMBER 5, 2002
Administration	\$13,250		\$17,727
Fuel and Lubricants	1,431		2,288
Livestock Supplies and Services	3,119		4,979
Veterinary and Medicine	2,730		4,424
Custom Work	2,804		3,995
Land and Building Taxes	920	(1)	1,289
Repairs and Maintenance-Buildings	2,360		2,789
Repairs and Maintenance-Equipment	4,097		6,324
Repairs and Maintenance-Supplies	994		1,068
Board Administration	1,511	(2)	2,458
TOTAL OPERATING EXPENSES	\$33,216		\$47,341

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

Statistics Canada, 62-004, Farm Input Price Index, Fourth Quarter, 2001

(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	\$ 102.73	\$ 562.96	\$ 33,215	
Purchased Hay	.49 t	122.73	60.14	3,548	
Produced Straw	.93 t	27.55	25.62	1,512	
Purchased Straw	.07 t	52.55	3.67	217	
Produced Barley	.51 t	158.96	81.07	3,205	(2)
Purchased Barley	1.81 t	173.96	314.87	12,447	(2)
35% Supplement	.47 t	421.00	197.87	7,822	(2)
16% Ration	2.73 t	248.00	677.04	13,182	(3)
Salt	3.53 kg	.28	.98	39	(2)
Minerals	13.00 kg	.86	11.18	442	(2)
Vitamins	.60 kg	1.59	0.95	38	(2)
TOTAL			\$1,936.35	\$75,665	

- (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 three month period ending July, 2002
 Straw Prices - Survey conducted by Manitoba Agriculture
 Barley Price - Adjusted average price received by Manitoba farmers, August, 2002
 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 @ \$15.03/hour	\$53,195
Hired labour	1,180 hours @ \$11.81/hour	13,936
Total direct labour	4,720 hours	<u>\$67,131</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, April, 2002

4. Management Fee

2% of total undepreciated dairy assets, (\$318,263) including the dairy herd	\$6,365
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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 @ \$1,821.00	\$34,599
Less: Sale of Culls (assuming 3 deaths): 16 head @ \$754.22	(12,068)
Less: Sale of Calves 26 Bull calves @ \$167.41 24 heifer calves @ \$273.15	(4,353) (6,556)
Net herd replacement cost per year	\$11,623

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 July, 2002
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 July, 2002 (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
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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 @ 5.50%	\$ 683
Long-Term Debt	75,598 @ 8.06%	6,095
Unfinanced Assets	156,226 @ 6.31%	9,853
Total Return on Assets		<u>\$16,631</u>

Source: Bank of Canada Review
 Short-Term Debt - B14020, Chartered Bank Prime Business Rate (plus 1½%), May, 2002
 Long-Term Debt - B14051, Chartered Bank 5-year Conventional Mortgage Rate, 60-month average to May, 2002
 Unfinanced Assets - B14047, Provincial Weighted Average Long-Term Bond Yield, 12-month average to May, 2002

8. Transportation

Annual cost of transporting milk to processing plants 3,363 hl @ \$2.15/hl	<u>\$7,222</u>
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Source: Manitoba Milk Producers' Marketing Board, Transportation costs, 12-month average to July, 2002

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	\$65,183,159
Add: Actual skim-off sold as Class 1b, 2 and 4a milk	15,351,797
Add: Actual Plant Loss (Class 4d)	<u>722,400</u>
Class 1 actual value of fluid revenue generated based on annual sales of 104.65 million litres	\$81,257,356
Less: Class 1 projected Value of Fluid revenue based on COP and on annual sales of 104.65 million litres	<u>\$82,553,491</u>
Adjusted Revenue Overage (shortfall)	(\$1,296,135)
Add: Applicable federal subsidy @ \$0.21 per kg of butterfat on Class 4a sales (eliminated)	<u>0</u>
Net Adjusted Revenue, Overage (shortfall)	(\$1,296,135)
Divided by Total Fluid Sales (1,046,467 hl)	\$1.2386/hl
Multiplied by Fluid Sales per Farm (3,363 hl)	\$4,164 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 (%)	.0036
Total cost of fluid Production (multiplied by)	x \$73.30
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	\$0.264/hl
Fluid Sales per Farm (multiplied by)	x 3,363 hl
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Transportation Shrinkage per Farm	\$887
Total Adjusted Fluid Requirement	\$5,051

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>\$4,684</u>
3,363 hl @ \$1.39/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	\$0.105
Fluid skim-off costs per farm, annually	<u>\$353</u>

Sources: Canadian Dairy Commission, 1996-97 Annual Report