
Producer Price and Milk Cost of Production Order

Regulation 77/94
Registered April 28, 1994

Definitions

1 In this order,

"**Act**" means *The Milk Prices Review Act*;

"**board**" means The Manitoba Milk Producers' Marketing Board established under *The Natural Products Marketing Act*.

Formula for cost of production

2 The cost of production formula set out in the Schedule is the cost of production formula established pursuant to subsection 3(2) of the Act.

Pricing system established

3 Pursuant to subsection 3(4) of the Act, the following pricing system of fluid milk is established:

(a) the pricing system shall be based on the butterfat content, protein content and other solid component content of milk;

(b) the quantity of each component referred to in clause (a) shall be the yearly average content of each component as reported by the board for the year ending July 31, 1990;

(c) the unit value established for each component referred to in clause (a) shall be consistent with the unit value for each component as calculated by the board for pricing the components in milk other than fluid milk;

(d) each product obtained by multiplying the quantity of the component by its unit value shall be added together;

(e) an amount representing a fluid premium shall be added to the sum of the products under clause (d).

All persons making use of this consolidation are reminded that it has no legislative sanction. Amendments have been inserted into the base regulation for convenience of reference only. The original regulation should be consulted for purposes of interpreting and applying the law. Only amending regulations which have come into force are consolidated. This regulation consolidates the following amendments: 163/94; 70/95; 110/95; 162/95; 14/96; 157/96; 141/97; 82/98; 25/99; 91/99; 129/2000; 39/2001; 144/2001; 6/2002; 154/2002; 7/2003; 107/2004; 206/2004.

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 \$75.26 calculated according to the following component quantities and unit values:

Butterfat	3.7034 kilograms @ \$5.3000/kilogram	= \$19.63
Protein	3.4092 kilograms @ \$6.0457/kilogram	= 20.61
Other Solids	5.7921 kilograms @ \$6.0457/kilogram	= 35.02
Total Price		<u>\$75.26</u>

M.R. 163/94; 70/95; 110/95; 162/95; 14/96; 157/96; 141/97; 82/98; 25/99; 91/99; 129/2000; 39/2001; 144/2001; 6/2002; 154/2002; 7/2003; 107/2004; 206/2004

4(2) For purposes of determining the price of milk testing more or less than 3.7034 kilograms of butterfat per hectolitre of milk, the quantity of butterfat per hectolitre of milk shall be the actual quantity as established by tests conducted in accordance with section 6.

Price basis

5 The price of fluid milk under section 4 is f.o.b. the processor's plant.

Butterfat content

6(1) The butterfat content of milk delivered by the board to a fluid processor's plant shall be established by tests conducted by MFC Testing and Research Inc. on a sample of the milk.

6(2) For the purpose of the tests referred to in subsection (1), a sample of the milk shall be taken

(a) by the transporter of the milk from milk that is in the producer's bulk milk tank before the milk is transported to a fluid processor's plant; or

(b) with the permission of the board, from a proportionate sampling device approved by the board when the milk is transferred from a delivery truck to a fluid processor's plant.

Volume of milk

7 The volume of milk in a truckload shipment delivered from the board to a fluid processor's plant shall be determined

(a) from the manifest that is prepared by the transporter and accepted by the fluid processor; or

(b) with the permission of the board, by a metering device when the milk is transferred from a delivery truck to a fluid processor's plant provided the metering device and its installation meet the requirements of the *Weights and Measures Act* (Canada) and are approved by the board.

Payment by fluid processor

8 A fluid processor who purchases milk from the board shall pay to the board at 36 Scurfield Boulevard, Winnipeg, Manitoba on account of the milk purchased in a month

(a) \$71.50 per hectolitre, payable by the 10th day of the month following the month in which the milk was delivered; and

(b) the balance, if any within 8 days of the date of the board's invoice to the fluid processor setting out the total selling price of the milk.

M.R. 70/95; 162/95; 14/96; 157/96; 141/97; 82/98; 25/99; 129/2000; 144/2001; 6/2002; 154/2002; 7/2003; 107/2004; 206/2004

Repeal

9 Manitoba Regulation 207/93 is repealed.

Coming into force

10 This order comes into force on May 1, 1994.

April 20, 1994

MANITOBA MILK PRICES REVIEW
COMMISSION:

Omer Van Wallegghem
Vice-Chairperson

Garry W. Epp
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

November 9, 2004 costs per hectolitre

1.	Operating Expenses	\$55,192
2.	Feed and Bedding	63,975
3.	Direct Labour	72,220
4.	Management Fee	6,371
5.	Herd Replacement	21,695
6.	Depreciation	12,475
7.	Return on Equity	8,747
	Interest on Debt	6,592

Sub-Total, On-Farm Costs \$247,267

Total volume of marketable milk per farm 3,481 hl

Total on-farm costs, per hectolitre produced \$71.04

8.	Transportation	\$7,714
9. & 10.	Adjusted Fluid Requirement	1,305
11.	Market Expansion Fee	4,841
12.	Fluid Skim-Off Costs	<u>342</u>

Sub-total, Off-Farm Costs \$14,202

Total volume of milk marketed per farm 3,363 hl

Total off-farm costs, per hectolitre marketed \$4.22

Total cost of fluid milk production, per hectolitre \$75.26

1. Operating Expenses

	1989 SURVEY		NOVEMBER 9, 2004
Administration	\$13,250		\$21,517
Fuel and Lubricants	1,431		2,476
Livestock Supplies and Services	3,119		5,430
Veterinary and Medicine	2,730		5,427
Custom Work	2,804		4,308
Land and Building Taxes	920	(1)	1,343
Repairs and Maintenance — Buildings	2,360		2,846
Repairs and Maintenance — Equipment	4,097		6,788
Repairs and Maintenance — Supplies	994		1,062
Board Administration	1,511	(2)	3,995
TOTAL OPERATING EXPENSES	\$33,216		\$55,192

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

Statistics Canada, 62-004, Farm Input Price Index, Third 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	\$90.15	\$494.02	\$ 29,148
Purchased Hay	.49 t	110.13	53.96	3,184
Produced Straw	.93 t	44.08	40.99	2,419
Purchased Straw	.07 t	74.87	5.24	309
Produced Barley	.51 t	74.20	37.84	1,496 (2)
Purchased Barley	1.81 t	99.20	179.55	7,097 (2)
35% Supplement	.47 t	419.20	197.02	7,788 (2)
16% Ration	2.73 t	226.60	618.62	12,044 (3)
Salt	3.53 kg	.28	.99	39 (2)
Minerals	13.00 kg	.81	10.53	414 (2)
Vitamins	.60 kg	1.54	.92	37 (2)
TOTAL			\$1,639.68	\$63,975

- (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 October, 2004
 Straw Prices — Survey conducted by Manitoba Agriculture
 Barley Price — Adjusted average price received by Manitoba farmers, October, 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 @ \$16.17/hour	\$57,228
Hired labour	1,180 hours @ \$12.71/hour	14,993
Total direct labour	4,720 hours	<u>\$72,220</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, September, 2004

4. Management Fee

2% of total undepreciated dairy assets, (\$318,558) including the dairy herd	\$6,371
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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 @ \$1,826.00	\$34,694
Less: Sale of Culls (assuming 3 deaths): 16 head @ \$227.44	(3,639)
Less: Sale of Calves 26 Bull calves @ \$107.15	(2,786)
24 heifer calves @ \$273.90	(6,574)
Net herd replacement cost per year	\$21,695

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 September, 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 September, 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
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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 @ 7.82%	5,909
Unfinanced Assets	156,521 @ 5.59%	8,747
Total Return on Assets		<u>\$15,339</u>

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

8. Transportation

Annual cost of transporting milk to processing plants 3,363 hl @ \$2.29/hl	<u>\$7,714</u>
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Source: Manitoba Milk Producers' Marketing Board, Transportation costs, 12-month average to September, 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	\$69,863,538
Add: Actual skim-off sold as Class 1b, 2 and 4a milk	17,807,207
Add: Actual Plant Loss (Class 4d)	<u>787,264</u>
Class 1 actual value of fluid revenue generated based on annual sales of 108.05 million litres	\$88,458,009
Less: Class 1 projected Value of Fluid revenue based on COP and on annual sales of 108.05 million litres	(88,000,370)
Less: Butterfat Credit	<u>(680,819)</u>
Adjusted Revenue Overage (shortfall)	(\$223,180)
Add: Applicable federal subsidy @ \$0.21 per kg of butterfat on Class 4a sales (eliminated)	<u>0</u>
Net Adjusted Revenue, Overage (shortfall)	(\$223,180)
Divided by Total Fluid Sales (1,080,542 hl)	\$.2065/hl
Multiplied by Fluid Sales per Farm (3,363 hl)	\$694 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 899,655 hl</u>
Transportation Shrinkage	2,609 hl
Total cost of fluid production	<u>x \$75.26</u>
Transportation Shrinkage (\$)	\$196,316
Divided by Total Fluid Milk Sales	<u>\$108,054.278</u>
	\$0.182/hl
Fluid sales per farm	<u>x 3,363 hl</u>
Transportation shrinkage per farm	\$611
Adjusted fluid requirement per farm (add)	<u>\$694</u>
Total adjusted fluid requirement	\$1,305

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

M.R. 70/95; 162/95; 14/96; 157/96; 141/97; 82/98; 25/99; 91/99; 129/2000; 39/2001; 144/2001; 6/2002; 154/2002; 7/2003; 107/2004; 206/2004