

Table 20. Total Expected Industry-wide Costs				
Item	HACCP Establishment Size Category			Total
	L	S	VS	
	\$thousand			
PL validation	749.1	1,510.1	385.7	2,644.8
PL Equipment & operations	14,351.3	42,390.6	0	56,741.
Growth inhibiting agent or process	521.7	10,597.6	0	11,119.4
FCS testing	.7	46.9	127.7	175.3
Production adjustments	77.9	238.7	834.8	1,151.4
Product handling and storage	165.0	489.6	311.4	966.0
Total Costs	15,865.7	55,273.5	1,659.5	72,798.7

Converting initial costs into an annual equivalent cost of capital recovery provides a more accurate measure of economic impacts.⁸ Using a 7-percent discount rate

over ten years results in annualized cost of \$9.3 million for PL validation, installation, agent and/or process alteration cost, and production adjustments. The annual

operating (recurring) costs are estimated at \$7.3 million. Combining these two estimates produces a total annual cost of the final rule of \$16.6 million (bottom of Table 21).

Table 21. Total Annualized Industry-wide Cost Impact, by establishment size.				
Item	HACCP Establishment Size Category			Total
	L	S	VS	
	\$thousand			
Initial	14,347.9	49,919.9	1,220.5	65,488.2
Recurring	1,517.8	5,353.5	439.1	7,310.4
Total	15,865.6	55,273.5	1,659.5	72,798.6
	22%	76%	2%	100%
Annualized Cost	10 year, 7-percent			
Initial	2,042.8	7,107.5	173.8	9,324.0
Recurring	1,517.8	5,353.6	439.1	7,310.4
Total	3,560.6	12,461.1	612.8	16,634.5
	21%	75%	4%	100%

Possible Indirect and Unintended Cost Impacts

The focus of the cost discussion thus far was mainly on industry-wide direct compliance costs: These costs, on an annual basis, were estimated at \$16.6 million, roughly one-half of one percent of the total annual value of industry sales (\$16.6 million divided by \$25.2 billion). In addition, some discussion was made of the possible impacts that the final rule may have on lowering

product quality, reducing current FCS testing frequencies in some establishments, and forcing some establishments to exit the industry. However, these impacts were not quantified. Two other possible indirect cost impacts are on consumers and other sectors of the economy.

No market product quantity and price data are available to calculate the possible consumer price implications brought about by the higher compliance costs identified in

this analysis. This information, plus an estimation of any reduction in market supplies, could be used to calculate the social costs of shifts in supply and demand in a consumer- and producer-surplus framework. Also, a complicating factor in estimating possible market supply reductions is to what extent imported product could be substituted for any U.S. RTE MPP production cutback. Without such information, one can only say that higher industry compliance

⁸Lynn E. Bussey, *The Economic Analysis of Industrial Projects*, Engelwood Cliffs, New Jersey, 1978.