

indicates that the final rule will cause some existing CAFOs to experience financial stress, making these operations vulnerable to facility closure. Across all sectors, an estimated 285 existing Large CAFOs might be vulnerable to facility closure. This accounts for approximately 3 percent of all Large CAFOs. By sector, EPA estimates that 49 beef operations (3 percent of affected beef CAFOs), 22 heifer operations (9 percent), 204 hog operations (5 percent of affected hog CAFOs), and 10 broiler operations (1 percent) might close as a result of complying with the final regulations. These estimates of the number of potential CAFO closures are cumulative and reflect the results of both the farm level analysis and the enterprise level analysis. These estimated closure rates are generally consistent with the findings of economic achievability of previous

effluent guidelines for other industrial point source categories. Based on the results of this analysis, EPA concludes that the final rule is economically achievable for existing CAFOs. More detailed information is provided in the *Economic Analysis*.

The results described above do not reflect long-run market adjustment and cost share assistance through federal and State conservation programs due to uncertainties associated with these considerations, for reasons discussed in the *Economic Analysis*. Although EPA concluded, based on the results in Table 8.2, that the final regulation is economically achievable, the *Economic Analysis* presents the results of alternative analyses under varying assumptions of long-run market adjustment and potential cost share assistance. Under assumptions of long run market adjustment, as reflected in eventual increases in CAFO revenue

and producer prices, the number of potential facility closures is reduced from 285 closures to a single facility closure in the beef sector. All operations in the heifer, hog, and broiler sectors are expected to be able to absorb the estimated compliance costs under an assumption that incorporates long run market adjustment. Under assumptions of partial cost share assistance, assumed for this analysis to cover 50 percent of the capital expenditure to comply with the revised regulations, the number of potential closures is reduced only somewhat from 285 closures to 261 closures (comprised of 43 beef, 11 heifer, 204 hog, and 3 broiler operations). EPA conducted these analyses only for the beef, heifer, hog and broiler sectors since all Large CAFOs in the other sectors are estimated to be able to absorb costs associated with the final rule.

TABLE 8.2.—FINANCIAL EFFECTS ON LARGE CAFOs: FINAL REGULATIONS

Sector	Number large CAFOs	Number			Percent of total operations		
		Affordable	Moderate	Stress	Affordable	Moderate	Stress
Fed Cattle	1,766	1,717	49	97	0	3
Veal	12	12	0	0	100	0	0
Heifer	242	220	0	22	91	0	9
Dairy	1,450	1,019	431	0	70	30	0
Hogs	3,924	3,249	470	204	83	12	5
Broilers	1,632	1,032	590	10	63	36	1
Layers: Dry ¹	729	729	0	0	100	0	0
Layers: Wet ¹	383	383	0	0	100	0	0
Turkeys	388	388	0	0	100	0	0
Total	10,526	8,749	1,491	285	83	14	3

Source: USEPA. See *Economic Analysis*. May not add due to rounding.

¹“Layers: dry” are operations with dry manure systems. “Layers: wet” are operations with liquid manure systems.

c. *Economic effects to existing CAFOs that are small businesses.* (1) Number of affected small businesses. This section presents EPA’s analysis of the economic effects on CAFOs that are small businesses. It summarizes the estimated number of small entities to which the rule will apply and describes the potential effects of the final rule on these businesses.

The SBA defines a “small business” in the livestock and poultry sectors in terms of average annual receipts (or gross revenue). SBA size standards for these industries define a “small business” as one with average annual revenues over a 3-year period of less than \$0.75 million for dairy, hog, broiler, and turkey operations; \$1.5 million for beef feedlots; and \$9.0 million for egg operations. EPA defines a “small” egg laying operation for purposes of its regulatory flexibility assessments as an operation that

generates less than \$1.5 million in annual revenue. EPA consulted with SBA on the use of this alternative definition. A summary of EPA’s rationale and supporting analyses pertaining to this alternative definition is provided in the administrative record and in Section 4 of the *Economic Analysis*.

Given these considerations, EPA defines a “small business” for this rule as an operation that houses or confines less than 1,400 fed beef cattle (includes fed beef, veal, and heifers); 300 mature dairy cattle; 2,100 market hogs; 37,500 turkeys; 61,000 layers; or 375,000 broilers. The approach used to derive these estimates is described in the *Economic Analysis* and the administrative record.

EPA estimates that of the approximately 238,000 animal confinement facilities in 1997, roughly 95 percent are small businesses. Not all

of these operations will be affected by the final rule. Table 8.3 shows EPA’s estimates of the number of “small business CAFOs that are expected to be affected by this rule. For this analysis, EPA estimates that about 6,200 affected CAFOs across all size categories are small businesses, accounting for more than 40 percent of the estimated 14,515 affected facilities. EPA estimates that among Large CAFOs about 2,330 operations are small businesses (accounting for about one-fourth of all Large CAFOs). Most affected small businesses are in the broiler sector. Among Medium CAFOs, EPA estimates about 3,870 operations are small businesses (accounting for the majority of operations in this size category), and most of the affected small businesses are in the hog, dairy, and broiler sectors.

For reasons noted in the administrative record, EPA believes that the number of small broiler operations