Impacts of Fluctuations in Inventory Levels and Raw Material Costs on Quarterly Financial Results

The following discussion seeks to explain the potential for volatility in our quarterly financial results because of the impact of (i) fluctuating inventory levels and raw material prices and (ii) the Company's use of the Last-In, First-Out (LIFO) method of inventory valuation, which operates on an annual rather than a quarterly basis. While such quarterly fluctuations tend to neutralize over the course of a full year – depending on the timing and cost of raw material purchases throughout the year and the year-on-year change in inventory levels – they may cause volatility in a particular quarter.

The Company has a historical pattern of building inventory in the first half of the fiscal year and reducing inventories in the second half of the fiscal year. This inventory pattern generally follows our sales pattern and the timing of customer plant shutdowns, after factoring in appropriate lead times.

The Company's surcharge mechanism, which is structured to recover increases in certain raw material costs, along with its use of LIFO inventory accounting, allows the Company to match current sales revenues with current raw material costs. To the extent we are selling in finished goods the same amount of such raw materials as we are buying (i.e., holding inventories levels constant), there is a theoretical matching of the raw material costs in revenues and expenses.

Despite this theoretical matching, however, the Company may experience significant fluctuations in its quarterly income statement if inventory quantities change, in relation to the prior quarter, at the same time that raw material costs fluctuate in relation to beginning of fiscal year prices.

Under LIFO accounting, building inventories in a period of deflating raw material prices, relative to beginning of fiscal year prices, will result in positive quarterly income statement effects. Periods of inflating raw material prices, relative to beginning of fiscal year prices, will result in negative quarterly income statements effects. The reason for this is that LIFO is an annual concept. As inventories are built throughout the year, the most recent costs (on a fiscal year to date basis) will be expensed in the income statement, while the costs from the beginning of the year purchases have been capitalized into inventory.

The opposite effects happen under LIFO accounting when reducing inventories. Reducing inventories in a period of deflating raw material prices, relative to beginning of fiscal year prices, will result in negative quarterly income statement effects. Periods of inflating raw material prices, relative to beginning of fiscal year prices, will result in positive quarterly income statement effects. The reason for this is that, to the extent we are selling more raw materials than we are buying (i.e., decreasing inventories), surcharge revenues will be at current raw material prices and the costs of sales associated with those revenues will come out of inventory at beginning of fiscal year prices.

The result – whether the scenario is one of building inventories or of reducing inventories – can cause a mismatch in the quarter of raw material costs in revenues (at current period prices) with the raw material costs associated with those sales under LIFO (at beginning of fiscal year prices).

The matrix below summarizes, directionally, the quarterly income statement impacts of fluctuating inventory levels and raw material prices relative to the matching of surcharge revenues with the costs associated with those revenues under LIFO:

		Raw material prices relative to beginning of fiscal year prices		
		Higher	**Unchanged**	**Lower**
Inventory levels compared to prior quarter	**Higher**	Negative	Neutral	Positive
	Unchanged	Neutral	Neutral	Neutral
	Lower	Positive	Neutral	Negative

Quarterly Income Statement effects