

APPENDIX A

Waste Reduction Promotion Flyers (For Clients)

Waste Is a Measure of Business Efficiency

Does this concept concern you as a small business owner or manager? It probably has affected your business and the management decisions you have made at times. The consideration that components of your business such as labor, space, time, materials, and energy are all cost factors is a straight forward one.

It is easy to recognize the value of reducing labor or energy costs associated with producing a product or service. Ideally, at every step in providing a service or producing a product, value should be added for the resources invested by the business. If there is no value added, the business has limited opportunity to recover costs of the resources that have been invested.

For example, in the 1980s United States automakers discovered they were at a competitive disadvantage with Japanese automakers. Japan was producing high-quality automobiles while consuming half the energy and generating half the waste of comparable vehicles made in the United States. Because there was less waste of energy and materials, more value was added to each product for the dollar invested. Japan's motivation to reduce resource costs was a factor in the high quality achieved in its products.

This highly visible example of competitive advantage is being repeated around us each day, both in global markets and domestic markets. The factors involved and the results are the same, whether you are a dry cleaner, a retail outlet, an insurance business, a furniture maker, or a machine shop. Cost efficiency is a never ending key to success and long term survival.

Don't let waste of material and energy resources get you down. If you would like to explore what your business can do to reduce waste costs, contact your Small Business Development Center office, Business Agent, or your County Extension office for more information.

Turn Regulations to Your Advantage

The 1960s and 1970s was an era of environmental regulation that added significant costs to businesses, and particularly to manufacturers. The objectives to protect the environment were and continue to be appropriate, but the regulatory methods resulted in expensive pollution control technology.

The pollution control strategies put forth in response to regulation treated wastes after they had been generated. There are two major problems with this strategy. First, the business had already suffered the costs of wasting resources before the waste is treated and disposed. Second, pollution control strategies often transferred the pollutants from one medium to another. For example, scrubbers on smokestacks remove pollutants from the air only to be deposited on the land as a solid or hazardous waste.

But what if waste could be eliminated in the first place? What if the waste wasn't generated, or the amount or toxicity of waste was reduced? Businesses that solve this challenge have a win-win situation. The costs of wasted resources are eliminated **and** the costs of pollution control is eliminated. In fact, it is likely that a number of other hidden costs related to waste generation and management would also be eliminated.

For example, a Tennessee dry cleaner found that by converting to new dry-to-dry technology, the efficiency of using the cleaning solvents was increased by over 400 percent, and the amount of solvent-related waste generated was reduced. This new technology was purchased in response to new Clean Air Act regulations. The resulting savings per month pays most of the loan cost in the short run and in the long run reduces the overall costs of the dry cleaning service. The business will ultimately improve its profitability and its competitive pricing. A side benefit is improved worker safety and health through less exposure to toxic chemicals.

The best way to beat regulations is to accept the challenge to innovate ways to meet them. In so doing you may well reduce or eliminate your regulatory burden. If you would like to explore your options, contact your Small Business Development Center office, Business Agent, or your County Extension office for more information.

Waste Reduction and Quality: A Matched Set

Waste reduction and quality may seem to be independent variables in a business. After all, some product specifications may require certain materials or processes be used to maintain minimum quality standards, and some wastes from those processes seem inevitable. In many cases, it is the result of internal standards and the expectation that any tampering with tried and proven materials or processes risks a sacrifice in quality.

Many companies have demonstrated that quality management programs can result in parallel improvements in product quality and waste reduction. For example, an industrial valve manufacturer used conventional solvent-based coatings in finishing its products with time tested materials and processes. There was reluctance to change specifications on something that gave a superior product finish. However, the coatings often resulted in blemishes that had to be refinished. About 7 percent of the valves had to be redone. At the same time, the processes and materials generated a costly hazardous waste.

At first, proposed changes in materials and process were rejected. However, a team of production and engineering personnel conducted a detailed analysis of water-based coatings to reduce the hazardous waste problem. The evaluation of alternative materials included an assessment of the durability and gloss finish of the coating. The result was a higher quality coating, a less than one percent refinishing rate, and nearly complete elimination of hazardous waste.

In recent years ISO 9000 has made business news as a quality management system. Now ISO 14000 has entered the scene as a parallel environmental management system. Both systems involve the implementation of management systems and protocols that foster improvements in quality and environmental performance, respectively. Both systems have implications that affect competitiveness or even acceptance in global markets.

For more information on waste reduction and quality opportunities, contact your SBDC office, Business Agent, or County Extension Office.