You and We and This Business of Ecology

Presented by CLYDE H. VADNER

Presents the scope of the solid waste problem in the United States and discusses the soft drink industry's role in proposed solutions.

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As individuals, our concern over the quality of life encompasses everything from air and water pollution to the defilement of the landscape. But, as businessmen, I think our immediate concern – and the urgent problems confronting us right now – center around litter, solid waste and resource depletion.

Let's get closer to our common ground by over-simplifying: The Coca-Cola Company and its Bottlers produce soft drinks which are put in packages. You sell those packages. And consumers buy them. More and more, consumers are buying our products in *convenience* packages: cans and one-way bottles. Fine. But *some* consumers are saying that *we* shouldn't use non-returnable packaging . . . and that *you* shouldn't sell it.

Why? Because it's generally believed *these* are the containers that most often wind up as litter. And, even when they're disposed of properly, cans and one-ways contribute to an already mammoth solid waste problem. In either case, they futher deplete our natural resources since – most times, anyway – the materials in these packages are *not* reclaimed, recycled and re-used.

And some of the best minds working on the solid waste problem today agree that *recycling* is the final answer. But it's estimated that *operational* recycling systems are ten years and thirty to forty *billion* dollars away.

Our problem is right now. And the purpose of this meeting is for us to share some information, put the problem in perspective, and consider what we can do *now* to reduce some of the impractical pressures being brought to bear on both our industries today. Once we've got all this behind us, we can invest even more time and expertise – more of ourselves – in working with others to help solve our environmental dilemma, to help solve the litter and solid waste problems we face today.

There's a lot of emotion surrounding the issues of litter and solid waste. But when people know the facts and understand them, they usually abandon emotion for reason and begin working toward realistic, achievable solutions.

That's what I'm suggesting for us . . . that we look at the facts . . . understand them . . . then get on with the job of working toward solutions.

And let's begin by having a look at the facts surrounding the growth of soft drinks.

Per Capita Consumption of Major Beverages

Soft drinks are out-pacing the per capita consumption of other major beverages in their growth. By 1973, soft drinks will approach the status of competing with coffee and milk.

Growth of the Soft Drink Market

The growth of soft drinks cannot be accounted for on the basis of population or per capita income increases alone. Over and above these factors, there has been a true increase in the demand for soft drinks among consumers. Much of this growing demand, of course, is due to such innovations within the industry as new brands and new products.

Soft Drink Sales Trends

Per capita consumption for every man, woman and child in this country is now at 360 per year. That's up from 287 just four years ago.

Sales Growth in Food Stores (Soft Drinks and All Commodities)

Dollar sales of soft drinks have out-paced all commodity volume in both chains and all grocery stores. *In* chains, soft drink dollar volume is almost *three* times the growth in all commodity sales through chains during the same period.

Today, soft drinks represent three-point-four percent of the dollar volume done by food stores. That's up from one-point-seven-six percent in 1960 – almost a hundred percent increase in the same ten years when our dollar sales were growing so.

Market Segmentation — Food Stores

Returnable bottles account for almost half of all soft drink sales in 1970. Cans are twenty-nine percent of the sales. And one-way bottles, twenty-three percent.

This ratio varies by section of the country, of course. Sixty-six percent of all soft drink sales in the South are in returnables. In New England, returnables represent only seven percent.

But these same variations also hold true within *areas* of the country – even for cities that are close to each other. Boston has over ninety-nine percent of all soft drink sales in convenience packaging. Providence – only sixty-five miles away – is *seventy*-nine percent.

In conclusion, there are wide variations nationally – sometimes, even within the same general area. From all indications, the soft drink business appears to be in good shape today. Per capita consumption, case sales, and our industry's share of total commodity sales through food stores *all* are up.

Your business – industry-wide – is doing all right, too. It was up eight percent last year alone.

Convenience Packaging and the Litter Problem

With the growth of convenience packaging – packaging which consumers clearly *demanded* we provide them – it appears that we've fallen victim to our own success.

"Litter" is a big problem. Especially so in my business. Our products are packaged in highly visible containers that are sold in volume quantities.

Roadside Litter

Because of this, you *see* beverage bottles and cans easily and remember them well, and *perhaps* are shooting at soft drink and beer companies more than our industries really deserve. The best information available on roadside litter currently is felt to be a survey conducted by the Highway Research Board, the National Research Council, and the National Academy of Sciences – who sampled the roadside litter in 29 states.

This survey revealed 64 percent of roadside litter was made up of materials not even related to packaging – newspapers, old tires, bedsprings, automobile frames, you name it, and we'll find it along a road somewhere. The study also disclosed that soft drink cans, all brands, constitute 3% of roadside litter, and soft drink bottles, all brands and all types, both one-way and so-called "returnables," constitute 2%, for a soft drink packaging total of 5%. It appears that even if there were no such thing as a soft drink industry, you and I would still have something like 95% of the roadside litter problem we have today.

Even at a level of only 5%, we'd like to solve our part of this problem and have been working all across the country to educate people (Truck Poster – NSDA) to change their attitudes with advertising and public relations, (Plant Signs), and also campaigns showing the value of a litter-free environment (Bend a Little Poster).

We're realistic enough to know that these activities won't solve the problem, but we sure hope they'll help. True experts say the only real solution to litter is 1) public education, 2) the provision of adequate disposal facilities and equipment, and 3) supporting these efforts with the enactment of reasonable, effective, and enforceable legislation. When all three of these factors are working for us, we can begin to control litter.

And now, this topic discussion is barely underway because litter is about 1% of a much larger and much more complex problem we call – SOLID WASTE.

Solid Waste

In fact, our real problem is one of community wide development of modern methods for solid waste disposal and material recycling. Solid wastes are the chief form of all LAND POLLUTION. Additionally, when solids are not disposed of properly, or not recycled for re-use, they then contribute to both air and water pollution. Coca-Cola is committed to a major, long range effort that promises not just to help us understand the problem better, but to assist in providing both the resources and the "know-how" to *help solve* this solid waste dilemma. Over three years ago, the Coca-Cola Company in Atlanta joined forces with a research team from Georgia Tech. The team's assignment was threefold:

1) To qualify and quantify solid waste problems generally.
2) To *relate* these findings to the operations of the food industry.
3) To recommend ways we can solve solid waste problems in this country. Their research has been both thorough and intensive and is already producing *usable* information and suggesting practical solutions. Let's cover a few of the highlights already developed by continuing research.

The study began in 1967. In that year, it was estimated by our federal government that the U.S. generated more than 3.5 billion tons of solid waste. That's enough to cover the total Miami, Florida area with a layer of trash 8 inches deep. This 3.5 billion is composed of 250 million tons of household, commercial, and municipal wastes, 110 million tons of industrial waste, 2 billion 50 million tons of agricultural wastes, and 1 billion 100 million tons of mineral wastes.

Now let's go back to the categories for Household, Commercial, and Municipal, and for Industrial. These amount together to 360 million tons annually, or 10% cent of the total solid waste – and this is the area where *packaging* wastes occur.

In 1967, *soft drink packaging* – all soft drink packaging produced – totalled 3.6 million tons – beer packaging, another 3.4 million. Together the total packaging for both our industries represented about 2 percent of household, commercial, municipal, and industrial wastes, or two 10th's of 1% of solid waste.

This is a total U.S. figure. If we look only at major urban areas, we find these packages representing a greater percentage within that urban area – between 3% and 4% of the category, or about double the overall national percentage.

I've thrown a lot of numbers at you, and all for the purpose of proving how small a portion of the overall problem we really attempt to solve when we attempt to solve the solid waste dilemma by controlling or restricting, or banning the packaging of beer and soft drinks.

Okay, I'll get off that track right away. I don't want to give you the impression that we're saying, "Leave us alone because we're so insignificant." We're really trying to say, "Go ahead, look at our industry, but don't look ONLY at us."

We've constructed a mountain of solid waste for you here this afternoon. What happens to it? Obviously, much of this mountain must be collected and disposed of – at least the household, commercial, and municipal portions do – and the cost of this collection and disposal is now estimated at 4 ½ billion dollars. Annually, it is projected to at least double in the next 5 years. Rising costs are only part of the problem. It's also clear that the methods used are far from what they ought to be. Almost three

quarters of all our residential and municipal solid wastes are disposed of by open dumping – 73%. These open dumps aren't only eyesores, they're breeding grounds for rats and flies and other disease carriers. Open dumps often catch fire, creating odors and air pollution as they burn almost endlessly. Open dumping is cheap (25¢/ton) but that's all you can say for it.

There's a big difference between a dump and a sanitary landfill. The former is an unconscionable mess, and the latter is a carefully engineered project that doesn't substantially interfere with either the ecological balance within an area or the long-range appearance of a tract of land. Unfortunately, though, only about 8 percent of the collected solid waste goes into sanitary landfills. For two main reasons: 1) cost – about *two dollars per ton,* and too few areas where space and 2) the proper terrain are both available.

The third major way we dispose of solid waste – after it has been collected – is through incineration. Mostly, this is simple burning, and it accounts for about 15% of all solid waste disposal. Cost is the main reason why most wastes aren't incinerated. And, of course, these figures vary by area. Even basic incineration – setting fire to material within a simple enclosed fire box costs about $5 a ton. Even so, the result is incomplete combustion and substantial air pollution caused by the uncontrolled burning and smoldering slag.

Modern incineration – with extremely high temperatures, total combustion and proper air pollution control – runs more than twice that: about $11 per ton.

However, an increasing portion of the greater cost of more efficient, non-polluting incineration is becoming recoverable in the form of heat generation for power plants as an example. But when you compare these costs with tthe 25% per ton cost of open dumping, it's pretty obvious where most of the material is going – and why. Advanced technology for environmentally sound solid waste disposal exists. But a vast amount of modern equipment and facilities are needed. And they are extremely expensive, especially in terms of what local city government can afford. Bond issues to support landfill projects, new incinerators and total recycling systems are hard to come by. Basically, the problem is a "people problem." One in which we're all involved and the costs of which we must all bear proportionately. And, it's one that won't be solved until enough people understand the problem and commit themselves to investing in its solution.

We just used the word "recycling." It's an important word to our view of one of the solutions of solid waste. head

Material Loop Cycle

This is a cycle – in this case, a cycle in the life of material – when we use something from nature for our own benefit, we first procure it by mining or harvesting or slaughtering, then process and manufacture it, package, and/or assemble it, and finally consume it. At each of these steps, some other things take place which are described as ITT. These initials stand for "inventory," "transport," and "transfer." Whether you're dealing with pork, wheat, ore, or a glass bottle, all material is inventoried, transported, and transferred before it is used, and then either disposed of or recycled.

Recycling, Closing the Loop

Since packaging is the area where soft drinks appear to contribute most to resource depletion and potential disposal problems, this is where our major opportunities for improvement lie.

In the recycling of packaging materials themselves, the closing of the loop, and thereby preventing the need to further deplete natural resources by additional procurement and negating the reason to consider packaging materials as waste at all.

There have been a number of excellent material recycle loops that we can all remember.

Home Processing Loop

Not too long ago, there was a home processing loop that worked quite well for a long time. The homemaker bought a few containers, processed and packaged her own food products, and inventoried her containers until they were either lost or broken. But today's affluence, the ready availability of packaged food products, and an urban society are the main reasons for the disappearance of this recycle loop.

Home Delivery Loop

The home delivery loop came next. But it's decaying rapidly, too. Increasing labor costs, disposable packaging and transportation problems are some of the reasons for the decline of home delivery loops. In fact, today, less than twenty per cent of all the home-delivered milk comes in returnable, recyclable, bottles!

Returnable Beverages Bottle Loop

Contrary to the opinion of many people, we do continue to sell Coca-Cola in returnable bottles in Philadelphia.

We've never discontinued this system. From the time these returnable bottles leave our bottling plant until they, hopefully, come back to be inspected, cleaned, and reused, they must be invested in, transported, and inventoried – not just one, but several times – by both the dealer and the consumer. If any one of these functions is NOT performed, or if any one of the parties in the loop declines to participate, that's when the returnable bottle stops being an effective recycling mechanism. A number of factors including store space, the cost of labor, and consumer apathy are putting substantial pressure on this recycle loop – and in spite of the wishes of some of us – this material loop also is breaking down.

Some people say degradability, particularly biodegradability, is the answer. A degradable package, they say, could just sort of "melt" back into the environment after being used. Unfortunately, this doesn't appear to be practical or even possible when it comes to packaging for soft drinks. Packaging, after all, is designed to protect the product.

The first and most important objective of a food package is to protect the food inside it from the material processes which would degrade the food as well as the container. We are experimenting with a plastic bottle for Coca-Cola with field tests underway for well over a year in parts of New England. While plastic is not biodegradable, it is more easily disposed of than glass – and we're checking such a package out thoroughly. Others in the industry are testing plastics as well – and, frankly, we have every reason to believe that the opposite "non-degradability," or material inertness may lead us to the development and use of more effective, more efficient, lower cost recycling systems within our production ori-

ented economy. We believe this is the workable alternative. Until this workable solution can be fully developed and put into use, we're doing the best we can with what we have.

Glass Depot

Early this year, we opened a glass collection depot to serve the interested groups in the Philadelphia area who are already collecting glass and returning it to the glass industry itself — a start toward a better recycling system.

We've found well over 200 such groups in our own area, boy scout troops, girl scout troops, church organizations, block clubs, that are saving glass. We help them get started, with information, guidance, the professional help they need, and then help them keep going by saving the high cost of transporting the glass to the glass industry.

We're now running an average of better than 50 tons of glass per week at this center, so the program is already becoming substantial. No, it's not the final answer. It's a start. It's proof that we are concerned and willing to do something — offering manpower, economic assistance, and know-how in the fight to save our environment.

Working together, as industry and retailer and consumer, we're convinced that workable solutions including the kinds we've discussed here today can be found and put into practical usage.

One week ago today in San Francisco, the National Association of Food Chains was addressed in convention by J. Lucian Smith, President of Coca-Cola U.S.A. and Donald Keough, President of the Coca-Cola Company Foods Division, on this same topic. They called pollution an "everybody" thing, and I'd like to quote from their notes.

"Most consumers don't understand the flow of materials from resource to waste and the thousands of jobs in industry that are involved along the way. They don't see themselves as polluters. Most consumers are not aware of the trade offs and sacrifice they might have to make to get the kind of environmental improvements they say the want. People find it hard to give up their conveniences. They're accustomed to a quality of life which perpetuates environmental pollution. In the long run, solutions to environmental problems may require major changes in their life styles, population dispersal, the pricing of energy consumption or new products designed for maximum life and efficiency. The advanced technology of our nation which has created these life styles, is already looking for ways to correct its environmental effects. Hopefully, technological innovations, rather than major changes in life styles, will provide the ultimate long term solutions."

These gentlemen summarized with note of specific programs proposed for the food industry to help implement understanding and I'll close with the same list of things that *anyone* — *you* — can help to bring about within the food distribution industry.

In Store Programs of Employee Training
Community Participation
Consumer Education
Communication with Legislators
A Coordination of Solid Waste Handling