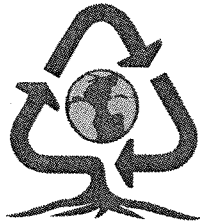


LATE TESTIMONY



Styrophobia.com
a natural way to go...

3133 Waiialae Ave. Ste. 3903 Honolulu, HI 96816

Email: info@styrophobia.com

Ph: (808) BE GREEN

COMMITTEE ON EDUCATION: Rep. Roy M. Takumi, Chair, Rep. Lyla B. Berg, Ph.D., Vice Chair

COMMITTEE ON HEALTH: Rep. Josh Green, M.D., Chair, Rep. John Mizuno, Vice Chair

Testimony in Support with ammendment: SCR 134, SD2 (SSCR3287) URGING THE DEPARTMENT OF EDUCATION AND THE DEPARTMENT OF HEALTH TO "BUY LOCAL" AND TO IMPLEMENT AND DEVELOP FOOD WARE AND FOOD WASTE RECYCLING PROGRAMS TO ENCOURAGE SUSTAINABILITY.

Wednesday, April 16, 2008 11:35 a.m. Conference Room 229

I am writing in support of this resolution, with amendment to remove any reference to the recyclability of polystyrene food service ware. In order to substantiate this amendment, please find attached supporting reference material.

While it is physically possible to recycle polystyrene commercial packing materials out-of-state, styrofoam foodservice ware recycling is not practical, economical or being done in any measurable way. The attached reference material supports this reality. The references were selected from industry sources, including the American Chemistry Council (plastics lobby) as well as the Hawaii Food Industry Association (HFIA). You will note that the first reference is dated from 1990, in order to show the legislators the background and plastics industry lobby efforts. Immediately following, you will find industry information that proves without a doubt that **food service ware is specifically excluded** from recycling programs. This is the reality and for the legislature to include these products as recyclable would be inaccurate and diverting from the intent of this resolution.

In fact, products such as sugar cane and corn-based food service ware are available now in the State from many sources. These products, along with food waste, can be composted and several efforts are currently underway with the Department of Health to permit existing composting facilities. By focusing on composting, and away from non-biodegradable or recyclable styrofoam, the State will be well on its' way to significant landfill diversion and support for composting.

We request the committees remove the following language:

“and

32 the recycling of polystyrene food ware that can be used locally

33 to produce new food ware or related products; and

34

35 WHEREAS, currently, there is only one manufacturer of

36 polystyrene food ware in Hawaii that meets with the

37 Legislature's goals of sustainability and providing additional
38 manufacturing employment opportunities in the State; and
39

40 WHEREAS, further effort is needed to encourage all
41 polystyrene food ware used in and food waste from Hawaii food
42 service facilities, including those operated by the Department
43 of Education, the Department of Health, and hotels and fast food
1 restaurants, to be recycled in order to promote more jobs and a
2 stronger sustainable future; and

3
4 WHEREAS, a similar recycling program has already been
5 successfully implemented in Massachusetts where both food waste
6 and polystyrene food trays are separated in cafeterias and sent
7 to their respective locations for recycling; and”

Thank you for your consideration,

Mike Elhoff
Styrophobia LLC
(808)BE GREEN

Polystyrene recycling: big money, big implications

by Tom Watson
Resource Recycling

SEPTEMBER 1990

In a bold attempt to show that post-consumer polystyrene plastic recycling can work, plastics producers have begun to pour millions of dollars into processing facilities, collection programs and research. This concentrated effort to showcase a new type of recycling will be a financial boon for many recycling companies and consultants around the country.

But the motives of the polystyrene producers for pushing recycling have raised concerns among some environmental activists. Plastics industry officials acknowledge that the main goal behind the recycling blitz is to head off government regulation such as the local polystyrene product bans that have been approved already in a few areas. By promoting recycling, the companies are only protecting their market share, say the activists, who believe the best strategy environmentally would be to reduce packaging.

Another concern is that the new projects — the plastics industry expects to have six major polystyrene recycling plants in operation by October 1990 — could lead to false expectations about this type of recycling. After all, no firm evidence yet exists that polystyrene recycling can support itself. High collection costs are the back-breaker for post-consumer polystyrene recycling, but the plastics companies will worry about that later. Right now they want pictures of recycling operations they can show at public hearings on polystyrene bans.

The artificial support of plastics industry subsidies could be the greatest underlying problem with polystyrene recycling. But it could also be its biggest advantage. Along with buckets of money, polystyrene producers are supplying some talented people from their own ranks. Obviously, this kind of support can result in breakthroughs much faster than the traditional shoestring-and-a-prayer method by which

many types of recycling have developed.

The plastics industry's recycling campaign also serves as an example to other manufacturers to take at least some responsibility for the disposal of their products. It is particularly significant that many of the recently announced projects target the polystyrene waste from "fast food" packaging. Jeanne Wirka, who has done extensive research on plastics and solid waste issues for the Washington, D.C.-based Environmental Action Foundation, believes the polystyrene recycling drive could put pressure on other manufacturers of fast food ware — the makers of paper cups coated with plastic, for example — to work on the recyclability of their products.

A nationwide system

Although several polystyrene recycling projects for processing and collection have been introduced since the first of the year, the most significant news came in early summer. Eight polystyrene manufacturers announced they would contribute \$2 million each to form the National Polystyrene Recycling Co. and establish five polystyrene recycling plants.

The first of these plants will be the Plastics Again facility (profiled in an accompanying story in this issue) in Leominster, Massachusetts. A joint venture of Mobil Chemical Co. and Genpak Corp., the Plastics Again plant has conducted a number of trial runs and began commercial operation this summer. Mobil and Genpak have agreed to sell the plant to the NPRC at cost.

Plastics Again will be used as the basic model for four more plants to be opened in the Southeast, upper Midwest, Southwest and on the West Coast, says Ken Harman, chairman of the board of directors for the NPRC. Harman's other job, which he will keep, is business director for styrene plastics for Dow Chemical USA, one of the eight NPRC companies.

a result, there is a general consensus to expand programs through greater outreach and increased convenience. If your community hasn't been filled with the spirit and aroma of yuletide mulch, perhaps now is the time to begin. **RR**

Polystyrene recycling

(continued from page 25)

happens to be the most prominent example of the high-powered effort the plastics industry is assembling. After leaving the top EPA post last January when the Reagan administration ended, Thomas promptly was named chairman and chief executive officer for Law Environmental, Inc., of Atlanta, an engineering and consulting firm that works on incinerator and hazardous waste projects, among others. NPRC has given Law Environmental the lucrative job of developing, siting and supervising construction of the new plants, as well as setting up collection systems for the polystyrene materials.

Jim Browne, an engineer for Law Environmental who is managing the NPRC work, says his company is "very actively looking" at possible sites for the plants. He says factors to be taken into consideration in choosing sites would include the availability and quality of local recycling collection operations, the local permitting process, and the possibility of public opposition (because of the location in a certain neighborhood, for example).

The participation of local recycling collectors will be critical to the success of the new plants, Harman emphasizes.

Harman says the ratio of feedstock at the four new plants will probably be about 75 percent post-consumer food service ware to 25 percent post-industrial scrap. Some post-commercial packaging materials might also be included, he says. At the beginning, the percentage of post-industrial materials may be greater, he adds.

The food service ware to be recycled will include polystyrene foam items, such as cups and clamshells used for sandwiches at fast food restaurants. (Polystyrene foam is often called Styrofoam, but that is a Dow trade name for a product not used by fast food outlets.) It will also consist of non-foam items such as food utensils and clear plastic food containers, which are polystyrene but made by a different process. These two types of poly-

styrene can be processed together. Plastics industry officials say an active market exists for the reprocessed polystyrene.

NPRC will not operate the five recycling plants itself, Harman notes. He says several major plastics and paper companies have expressed interest in operating the facilities, including Dart Container, Genpak, Fort Howard, James River and Scott.

Each plant will process post-consumer polystyrene collected from a radius of several hundred miles. Harman says collection networks will most likely include satellite handling operations and densification plants. Existing materials recovery facilities may also be used as links in the system. Collection efforts will focus on large-volume sources, such as schools, hospitals and restaurants, Harman says.

The Amoco experience

Another polystyrene recycling plant — financed by a plastics company but not directly associated with the NPRC — began operation in April. Located in Brooklyn, New York, the 10,000-square-foot plant is operated by Polystyrene Recycling, Inc., a subsidiary of Amoco Foam Products of Atlanta.

The PRI plant was designed with a different mission in mind than that of Plastics Again in Massachusetts. Mobil and Genpak went with source-separated feedstock from the start at Plastics Again, Amoco's idea was to handle mixed waste from McDonald's restaurants, schools and area businesses, separate the polystyrene and reprocess it.

But it only took a few months to determine that there was no way this type of polystyrene recovery could be done economically, says Robert Russell, who serves as president of PRI, in addition to his position as director of issues management for Amoco Foam Products.

From now on, all new feedstock added at the PRI plant will be source-separated polystyrene materials. Russell says the long-range goal is to delete the mixed waste entirely.

Under the mixed waste sorting operation, incoming materials each work day consisted of about 6,000 pounds of mixed waste, mostly from McDonald's restaurants, and 1,900 pounds of source-separated polystyrene, mostly from area schools. Polystyrene makes up less than 10 percent of the McDonald's trash received, says Russell.

Plant production from this material was at 2,500 pounds per day of polystyrene flakes (for a six-hour production day), says Russell. The plant's production goal is 1,000 pounds of flakes per hour. With

the percentage of source-separated materials increasing, Russell believes the plant can be profitable by this winter.

However, much of the existing equipment will be unnecessary if the plant eliminates mixed waste as a feedstock. Currently, the mixed waste is shredded, screened and air-sorted. Pieces of polystyrene and paper are then pulped together. Finally, the two materials are separated with screen washing, and the pieces of polystyrene are dried. The remaining paper and other wastes are made into refuse-derived fuel pellets, Russell says, but no market has yet been found for these.

Source-separated polystyrene presently is added to the process just before the pulping stage, according to Russell.

He says he would eventually like to add a new line at the plant to handle molded foam blocks made of expanded polystyrene, which are commonly used in packaging appliances and electronics equipment. However, he notes this material sometimes has been treated with an anti-static additive. Because of possible contamination from that chemical, this type of polystyrene would not be used to make new products that might have even an indirect contact with food, such as food service trays.

Russell says Amoco Foam may eventually sell the plant. He adds that it could conceivably link up with the NPRC. Amoco Foam is part of Amoco Chemical, an NPRC member.

Some of the reprocessed resins produced by PRI are used to make insulation products at the Amoco Foam plant in Winchester, Virginia. Another promising user of recycled polystyrene is Rubbermaid Commercial Products Inc., also of Winchester. Charles Lancelot, manager of materials and process technology for the company, says tests with recycled resins from both Plastics Again and PRI have been encouraging.

But according to a report in the *North Jersey Herald & News*, Rubbermaid materials engineer Len Horst said the company has found problems with the quantity and quality of the recycled resin supplied by the Amoco facility. "There's very little of this great fantastic material available and when it is available, there are problems in the process of reprocessing it," Horst said. "We're waiting . . . to make high-quality products with low-quality material."

Rubbermaid Commercial expects to use an increasing number of recycled plastic resins of various types in the coming years, due to customer demand, Lan-

celot says. For example, New York City has specified a minimum of 10 percent post-consumer resins in plastic containers it will order for curbside recycling.

The company may use recycled polystyrene in food service trays or office accessories, says Lancelot. Rubbermaid would add modifying agents during production to provide the necessary toughness, he adds.

Lancelot says he expects the company's costs to produce products using recycled polystyrene would remain essentially the same as when virgin resins are used. This is the case for recycled plastics of other types already used in production, he observes.

He points out that Rubbermaid does not need to use recycled plastics for public relations purposes, since the company makes only nondisposable products. "We're doing it because our customers want it," Lancelot says. "For us it's good business."

McDonald's recycling

On the other end of the solid waste issue is McDonald's Corp., the nation's most visible user of huge quantities of polystyrene disposables. The Oak Brook, Illinois-based corporation has more than 10,000 affiliated fast food restaurants worldwide, with nearly 8,000 in the U.S.

As McDonald's has faced increasing pressure over its use of polystyrene, the company has begun to experiment with disposal alternatives other than having the waste end up in landfills. For example, McDonald's is testing on-site garbage incinerators at four separate restaurants around the country, says Linda Fontana, the company's media relations manager.

On the recycling front, McDonald's has contributed some of its mixed waste to the PRI recycling plant in Brooklyn. And in Portland, Oregon, McDonald's is conducting its first test to see whether customers will separate their polystyrene disposables from their other trash. Seven Portland-area McDonald's restaurants began the source separation experiment this summer, and more of the company's Oregon restaurants will probably be added. The project has started out well, with active customer participation, Fontana says.

Denton Plastics Inc., a Portland-based processor and broker of various scrap plastics, handles the polystyrene from the McDonald's source-separation pilot program. Company president Dennis Denton says he has standing orders for 50,000 pounds a week of reprocessed polystyrene pellets. He declines to name his mar-

kets, for competitive reasons.

Although some in the recycling industry question the economics of polystyrene collection, Denton is convinced he can make money collecting, processing and marketing the material. In fact, he says he proposed the source separation idea to McDonald's because he needs more sources of used polystyrene. Denton says he has developed systems for collecting, cleaning and processing polystyrene, and he hopes to eventually license other processors around the country to use his techniques.

Some other ideas

Examples of other types of polystyrene collection programs can be found in Akron, Ohio and Atlanta, Georgia. In Akron, wTe Corp. is working with Dow Chemical and the City of Akron on a curbside collection pilot project in which several types of plastics, including polystyrene, are among the materials collected.

Based in Bedford, Massachusetts, wTe operates various recycling, incineration and engineering facilities around the nation. The company also designed and helps operate the equipment that separates polystyrene from mixed waste at the PRI plant in Brooklyn. In Akron, plastics and other materials are being collected with several experimental methods, including "blue boxes" and compartmentalized vehicles. At the materials recovery facility operated by wTe in Akron, equipment will soon be installed that will separate and clean the polystyrene, says Bruce Bond, wTe's director of marketing. Polystyrene items are currently picked out by hand, and will be shipped to the nearest available market, he says.

In Atlanta, Amoco Foam Products helps sponsor a program under which Mindis International, operator of eight buy-back centers in metropolitan Atlanta, pays the public five cents a pound for polystyrene food service items.

But Don Smith, who runs the plastic program for Mindis, reports, "We're getting very little." The company does have a regional area market for polystyrene, which he declines to name.

Smith says he does not think post-consumer polystyrene recycling is currently economically feasible, due to the problems in collecting the lightweight, bulky material. "At this moment, I don't think anybody could make any money without it being subsidized," he says. Smith does have hopes for the future, however, and Mindis personnel will work with local schools to try and set up collection programs this fall.

The critics respond

The surge in polystyrene recycling activity has not appeased environmental activists, who would prefer that the use of polystyrene in packaging be greatly reduced, if not eliminated.

"The real problem with Styrofoam is not at the back end. It's at the front end, when it is manufactured," says Karen Stults, of the Citizen's Clearinghouse for Hazardous Wastes, Inc., in Arlington, Virginia. Stults coordinates the clearinghouse's "McToxics" campaign of demonstrations and actions protesting McDonald's use of polystyrene.

Stults' group argues that the production process for polystyrene results in great harm to the environment. "Recycling isn't going to make that go away," she says. Polystyrene recycling projects "are more an excuse than a solution," she adds.

Jeanne Wirka, of the Environmental Action Foundation, says she is skeptical of both the viability of the newly announced polystyrene recycling projects and the motives of the plastics industry in financing them. She believes the industry's main motive is fear that it would suffer from local ordinances promoting recyclable packaging.

Wirka finds the idea of having separate bins for collecting polystyrene packaging in McDonald's restaurants somewhat ridiculous, since those bins collect packaging "which is the least necessary." Rather than collecting polystyrene clamshells that have a useful life of 30 seconds, Wirka wonders why McDonald's couldn't just sell its sandwiches without the polystyrene when people eat inside the restaurants.

However, when it comes to solid waste issues, Wirka says the companies she trusts the most are not the plastics producers but rather the companies who sell food or products directly to the public, such as McDonald's, Procter & Gamble, and Kraft. Consumers have the ear of such companies, she says, and those firms will eventually respond to consumers' desires.

For their part, plastics industry officials say their industry has tried to be responsible. R. Jerry Johnson, executive director of the Polystyrene Packaging Council Inc. in Washington, D.C., says the industry supports the idea of reduction in packaging. But reduction is not always as easy as it seems, and the use of polystyrene is often the most efficient method of packaging, he adds.

Robert Barrett, general manager of Mobil Chemical's solid waste management solutions group and an NPRC direc-



Polystyrene Recycling - Long-Term Market Trends

Analyzing long-term recycling trends for post-consumer polystyrene and other post-consumer disposable food service packaging since the early 1990s, the data show a clear evolution of the polystyrene recycling industry towards the recycling of non-food service polystyrene materials. The recycling of expanded polystyrene (EPS) protective packaging and non-packaging polystyrene materials, (such as insulation board, audio/visual cassettes, and agricultural nursery trays/containers) has increased dramatically during this time period, and there has been a decrease in the amount of polystyrene food service packaging recycling during this period.

Today we continue to see growth in post-consumer polystyrene recycling in applications that have favorable recycling economics, such as protective packaging and non-packaging non-durables. These applications are less contaminated with food and other wastes than food service products are and therefore are more cost-effective to recycle. Currently, post-consumer food service polystyrene packaging is not recycled in a significant way. It is important to note that because of unfavorable economics, no other post-consumer food service disposable material is recycled in a measurable way.

The polystyrene industry has taken its investment in advancing polystyrene recycling very seriously. The National Polystyrene Recycling Company was created in the early 1990's to establish the viability of post-consumer recycling for a wide range of polystyrene applications. The industry invested approximately \$85 million dollars, a majority of which were capital costs used to get the operations established. This spurred the current network of polystyrene recyclers, who today recycle approximately 50 million pounds of post-consumer polystyrene each year. This investment in polystyrene recycling, including food service applications, is very significant, given the near absence of paperboard food service recycling over the same time period. Unfortunately, time and experience have shown that the infrastructure needed to collect polystyrene and sell recovered material is not sustainable in all markets.

Polystyrene products remain very popular with consumers. All polystyrene packaging markets continue to grow, with more than 1.4 billion pounds sold in 1999, representing 22% of the total polystyrene market. Polystyrene food service products are an attractive choice because of their excellent insulation properties, their low cost compared to other disposable materials and reusables, their lower overall life cycle energy and environmental impacts, and their protection of public health and sanitation. However, the properties of polystyrene that make it an excellent packaging material -- its light weight, energy efficiency, strength and product performance -- work against the economics of recycling this material.

What is often lost in examining polystyrene's impact on the environment, particularly solid waste disposal, is that all polystyrene packaging comprises less than one percent by weight of the total municipal solid waste disposed in U.S. landfills. Moreover, the polystyrene (and plastics) industry has achieved significant landfill reduction through a combination of up-front actions - including source reduction and reuse. Recycling is only one of several ways to manage solid waste effectively. It is not the only answer for all environmental dilemmas.

The impact of these up-front activities is dramatic. More than 2.9 billion pounds of polystyrene packaging and disposables have been eliminated from the solid waste stream since 1974 through source reduction, product redesign and reuse.

[ACC Home](#) | [PFPG](#) | [Terms & Conditions](#) | [Privacy Policy](#) | [Site Map](#) | [Contact Us](#)

Welcome to the Internet site of the American Chemistry Council[®] (ACC), which represents the leading companies engaged in the business of chemistry, including significant business groups such as the Plastics Division and the Chlorine Chemistry Division.

© 2007 American Chemistry Council, Inc.

essential²[®], e²[®] and americanchemistry.com[®] are registered service marks of the American Chemistry Council, Inc.

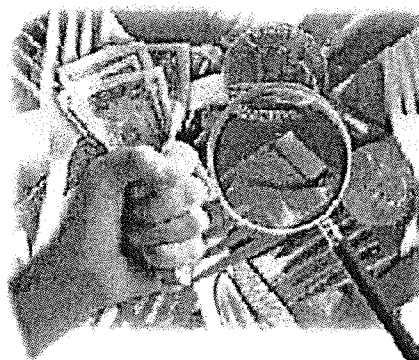


Economic Realities of Recycling

By Raymond J. Ehrlich

The PFBG often answers questions from individuals and organizations who are frustrated that they "cannot recycle their food service polystyrene material." The following information helps to explain the economic issues associated with food service polystyrene recycling to increase understanding, and resolve some of the frustration many are feeling.

As the 21st Century begins, the desire of many of us to protect and preserve our environment is stronger than ever. Recycling is one generally easy and convenient way each of us can help. Recycling continues to be an important issue for the polystyrene industry, as well. However, the economic realities of recycling must not be overlooked and recycling should not be viewed as the sole answer when addressing environmental issues.



When recycling is seen as the only way to protect and preserve our environment, we are ignoring many other factors that impact our surroundings. Recycling is just one aspect of a very complex and inter-related issue. In addition to recycling, other issues that combine to directly affect our environment include: natural resource use, pollution generation, energy use, waste generation, waste reduction, reuse, and ultimately waste disposal.

While recycling is viewed by much of the public as primarily a social issue, few people outside the recycling and solid waste management field have examined recycling from an economic perspective. Much of the attention afforded recycling has focused on its *perceived* value. However, for recycling, or any environmental management alternative to be successful, it must be cost effective. As Sarah Halsted said in the October 27, 1997, issue of Waste Age's Recycling Times, "The relationship between environmental goodwill and sustainability versus market and economic reality puts ... recycling programs in a sometimes uneasy position."

The general economic realities of recycling are true not only for polystyrene, but also for all commonly recycled materials: paper, cardboard, glass, aluminum, metal and textiles. Recycling must be economically viable when compared to other methods of waste management and resource conservation.

Polystyrene Food Service Recycling -- A Very Brief History

Around 1988, pressure was put on the polystyrene industry to recycle the most highly visible polystyrene products -- food service containers -- even though all polystyrene packaging products represent *one percent* by weight of the total municipal solid waste disposed in U.S. landfills. There was significant public pressure to recycle and/or restrict the sale of food service polystyrene, despite the fact that alternative food packaging (paperboard, flexible packaging, aluminum wraps) were not held to the same standard. At that time, eight polystyrene resin supplier companies invested millions of dollars to build a nationwide infrastructure to provide for polystyrene recycling. The National Polystyrene Recycling Company (NPRC), intended to be a catalyst to spur increased polystyrene recycling, initially had five plants on line to recycle post-consumer polystyrene.

How successful has food service polystyrene recycling been from an economic viewpoint? Not very. This was due to several reasons, many of which the industry discussed in the late 1980s. Mainly, the

properties of polystyrene that make it an excellent packaging material, e.g., its light weight, energy efficiency, strength and product performance, worked against the mechanics of recycling this material. Just like in the distribution system for polystyrene food service products, transportation distances play a key role. The economics of hauling polystyrene long distances (to the nearest available recycling plant) were not always favorable. The industry learned that polystyrene has to be densified or baled to get a sufficiently concentrated volume to make transportation over long distances cost-effective. Also, food service products of all materials -- paper, metal, plastic, and polystyrene -- are generally highly contaminated, and require cleaning before they can be processed for recycling, which can add significant costs.

Despite these issues, at this time generally transport/protective packaging and non-packaging non-durable polystyrene materials (e.g., audio/video cassettes, CD jewel cases, insulation board, etc.) can still be recycled where programs exist. In 2001, over 25 million pounds of polystyrene transport/protective packaging and almost 30 million pounds of non-packaging non-durable polystyrene materials were recycled. In about 10 years, total polystyrene recycled essentially grew from zero pounds per year to approximately 50 million pounds per year. This is quite an achievement when viewed in comparison to the more traditionally recycled commodities (paper, metals, and textiles) that have been recycled for many, many decades.

Recycling Economics

Economics is a major factor in determining the success or failure of recycling for all materials -- not just for polystyrene. Recycling actually occurs when, and only when, recyclable materials that have been collected, sorted, processed, and remanufactured into new products are purchased by consumers. Recyclable materials separated from garbage should not be viewed as waste, but as a raw material or feedstock for industries to use in making new products. The ultimate success of recycling depends on stable, reliable markets for these materials. Without markets to purchase the collected and separated recyclables, recycling does not happen, with the unfortunate result that these materials often must be disposed of in landfills or waste-to-energy plants.

One of the most basic principles of economics is the principle of supply and demand. Stated simply, when the demand for a particular good or service is greater than the supply, the price that sellers can charge for that good or service increases. Conversely, when the supply of a particular good or service is greater than the demand, the price that sellers can charge decreases. So, what does this have to do with recycling? *Everything*. This principle describes exactly the situation with recyclables in general and polystyrene specifically. End-use markets are entities that purchase recycled as well as virgin materials from a number of sources and use these materials as feedstock to manufacture new products. Recyclable materials, therefore, compete for markets with virgin supplies of the same material. The opportunities for markets to use recycled material are often actually fewer than those for virgin material, due in part to lower performance characteristics of the recycled material because of contamination.

Recycling, then, depends on the existence of markets for the recovered materials. When a viable market for recycled material exists, the price paid, or the fee charged, for the material is generally at a level that will cover the costs to collect, process, and ship the material.

Polystyrene Recycling -- What's Next?

What does the current state of markets mean for polystyrene recycling? Simply, it means that recycling food service polystyrene does not make economic sense at this time. This does not mean that they are "environmentally bad" products and should not be used. The success of paperboard recycling, for example, does not rest with its food service applications, but with corrugated cardboard and high-grade office papers.

So, what are the options to recycling polystyrene? The options are the same for polystyrene that they are for other materials - recycle those polystyrene products that make economic sense. For example, polystyrene packaging, polystyrene audio and video cassettes, CD jewel cases, and insulation board are being successfully recycled.

Today, the polystyrene industry remains at a crossroads with respect to food service recycling. The economics

of recycling and waste disposal have changed since the late 1980s. Contrary to public perception, there is plenty of inexpensive landfill capacity available, significantly reducing the cost of disposal in some areas of the country. Also, public and private institutions that use low cost polystyrene products are often on tight budgets, and have to make the choice of the most cost-effective option between recycling or disposal.

Observations

In the future, we will continue to see an absence of polystyrene food service recycling programs, because in business, economics rule over emotion. Recycling companies, like any other business, must make a profit to survive. If there is not enough market demand for recycled polystyrene material, fewer recyclers will continue to handle polystyrene.

So, what should the polystyrene industry do? It should promote accurate information about polystyrene with regard to the product performance and environmental aspects of polystyrene packaging. Food service polystyrene products are safe, sanitary, energy-conserving, FDA-regulated disposable products. In addition, we should not forget why people purchase polystyrene food service products in the first place: they do the job. They are efficient, low-cost, and are safe in the environment. Should polystyrene food service packaging be recycled only when it makes economic sense? The balance between recycling as an ethic and recycling purely as an economic issue is one in which we all have varying opinions.

[ACC Home](#) | [PFPFG](#) | [Terms & Conditions](#) | [Privacy Policy](#) | [Site Map](#) | [Contact Us](#)

Welcome to the Internet site of the American Chemistry Council[®] (ACC), which represents the leading companies engaged in the business of chemistry, including significant business groups such as the Plastics Division and the Chlorine Chemistry Division.

© 2007 American Chemistry Council, Inc.

essential[®], e2[®] and americanchemistry.com[®] are registered service marks of the American Chemistry Council, Inc.

Plastics lobby tries to roll back wave to ban polystyrene.

Posted February 21, 2008 By Kera Abraham



Mike Levy of the American Chemistry Council's Plastics Foodservice Packaging Group tells the Chamber that banning polystyrene is a flawed solution.

It's energy-efficient, cheap and more environmentally friendly than most people realize. Heck, you might even call it sustainable. Contrary to popular belief, it *is* recyclable – and the claims that it poses a human health risk are unsubstantiated. If it ends up on streets, beaches and in the guts of wild animals, blame litterbugs, not the product.

So argues Mike Levy, director of the American Chemistry Council's Plastics Foodservice Packaging Group, in a well-timed effort to counteract momentum for a regional ban on polystyrene, better known as Styrofoam. The ACC has retained PR-heavyweight Armanasco Public Relations, Inc. to make its case locally, and Levy himself addressed the Monterey Peninsula Chamber of Commerce on Feb. 13. Two days later, Monterey Regional Waste Management District's Litter Abatement Task Force presented the district's board with a draft polystyrene ban.

The ban's supporters, including a half-dozen environmental groups, say the ubiquitous plastic foam litters land and sea, swells landfills, leaches toxic chemicals and harms animals that mistake it for food. The cities of Capitola, Santa Cruz and Santa Monica have banned take-out polystyrene packaging, and Santa Cruz County is scheduled to consider a similar ordinance in March. As the ban's supporters focus on Monterey County, so does the plastics lobby.

The waste district's draft ordinance would require food providers, government facilities and their contractors to replace single-use polystyrene products with biodegradable, compostable or recyclable alternatives. Public works directors could grant one-year exemptions, and businesses could charge a "take-out fee" to cover the difference in cost.

But the plastics industry isn't ready to lose its business in polystyrene or plastic bags, another material local officials have talked about banning. (A state law requires large grocery stores and pharmacies to sell reusable bags, and accept plastic bags for recycling.) California restaurants spent about \$210 million on plastic packaging in 2005, Levy says.

And so Levy traveled to California from Arlington, Va., to promote the ACC's \$2.5 million contribution to statewide anti-litter and polystyrene recycling campaigns in 2008 – and lobby against potential plastic bans. "We're not against degradables and we're not against compost," he told the Monterey Peninsula Chamber of Commerce. "We're against being singled out and the misconceptions."

One such misconception, Levy says, is that polystyrene is not recyclable. "There's a perception that you can't recycle it, and that's absolutely false," he says. "Like all plastics, it's a matter of getting the volume."

Waste district spokesman Jeff Lindenthal isn't so sure. "We kinda default to the California Integrated Waste Management Board's statement that no meaningful recycling of polystyrene is happening in California," he says. Local curbside recycling programs do not accept polystyrene, he says, and the district hasn't found a recycler interested in buying Monterey County's polystyrene waste.

Levy is appealing to the local business community to oppose the proposed ban. Restaurant owners would pay more for biodegradable food packaging, a cost he says the waste district hasn't fully considered. "They haven't requested a lot of input from the business folks at all," he says.

Lindenthal counters that, after analyzing other cities' polystyrene bans and crafting one appropriate to the region, the litter task force is now reaching out to local restaurateurs. "We had the California Restaurant Association person sitting at the table with us as we worked through these ordinances," he says. "We were concerned about making sure we did hear from the business community."

He also questions the ACC's suggestion that all litter is created equal. Plastics stick around forever, he notes, while paper-based products biodegrade. "We've been looking at the results of local beach cleanups," he says. "By volume, polystyrene is the biggest thing that's being picked up."

Carolyn Swanson of local biodegradable packaging distributor Passion Purveyors estimates that green food packaging costs 3 to 12 cents more per unit than petroleum-based plastic. But she hopes local restaurant owners will also consider the costs of litter and ocean pollution. "The defense of 'well, it's cheaper' really isn't true in the long run," she says.

Printed from the Monterey County Weekly website: <http://www.montereycountyweekly.com/archives/2008/2008-Feb-21/plastics-lobby-tries-to-roll-back-wave-to-ban-polystyrene>

References to the recyclability of Food Service Polystyrene (Styrofoam)

Polystyrene is usually associated with foam. However, many polystyrene containers look like other types of plastic, especially HDPE and polypropylene. Polystyrene bottles are rare. You will see some products like yogurt in polystyrene. Another recent package is a perforated transparent clamshell for fruits and vegetables. The recyclability of polystyrene is limited. A polystyrene recycling facility in the Chicago area closed several years ago, so the Midwest market for the material has evaporated. It is unlikely that polystyrene containers in the grocery store have any recycled content.

<http://www.recycleminnesota.org/htm/ReProdGroc.htm>

The "generator" (you or a commercial entity) must avoid polystyrene contamination with food, staples, tape, and so on. Dirty or comingled EPS is not recyclable.

http://www.treehugger.com/files/2005/12/what_can_we_do.php

4. How much post-consumer PS is currently recycled?

The breakout of the total by PS packaging type is as follows: Protective Packaging - 25.2 million pounds; Food Service Products - 0.2 million pounds; Other PS Applications (non-packaging non-durables) - 29.7 million pounds, and; Bottles and Containers - 0.2 million pounds.

http://www.americanchemistry.com/s_plastics/doc_pfp.asp?CID=1417&DID=5332#7

Polystyrene Products and Recycling

Polystyrene Packaging Council (PSPC)

source: <http://www.polystyrene.org> 23jul01

Recycling of Polystyrene

Please note that due to present economic conditions, polystyrene food service packaging is generally not recycled. Polystyrene protective packaging and non-packaging non-durables (i.e., video/audio cassettes, agriculture trays, etc.) are the primary forms of polystyrene collected for recycling. There has been a decrease in the amount of polystyrene food service packaging recycled during this period. Non-food service packaging is not contaminated with food and other wastes as is food service polystyrene packaging, and therefore is more cost-effective to recycle. Presently, food service polystyrene packaging is not recycled because it is not economically sustainable. It is important to note that because of unfavorable economics, no other post-consumer foodservice disposable material, including paper and paperboard, is recycled in a measurable way.

1. Once you have identified the closest collection site, call them to verify drop-off times and check to see what types of polystyrene material they accept.
2. Make sure your EPS is clean and free of any plastic film, loose parts or glued-on cardboard.
3. Check to see if they accept other recyclables to streamline your recycling efforts.

EPS National Mail-Back Option

If there is no EPS recycling in your community please send it via U.S. Postal Service or other carrier to the address below. Average shipping fees range from \$1.50-\$9.00 based on the total packaging weight. To maximize your EOS recycling efforts via the mail-back option we recommend the following:

1. Make sure the EPS is clean and free of any plastic film, loose parts or glued-on cardboard.
2. To increase the amount of EPS in each shipping container, it can be easily broken or cut into smaller pieces so that more foam can fit in individual boxes. AFPR will also recycle the corrugated boxes used to ship the EPS.
3. When shipping EPS biomedical coolers simply tape the top and bottom pieces together with shipping tape and apply the label and postage directly to the EPS. An outer, corrugated box is not necessary.
4. AFPR does not accept extruded polystyrene (XPS) foam including meat trays, cups, egg cartons or other disposable foodservice items for recycling.
5. Prepare shipping label and affix postage for delivery to:

Alliance of Foam Packaging Recyclers
1298 Cronson Boulevard, Suite 201
Crofton, MD 21114 USA

6. To facilitate shipping from home, the United States Postal Service (USPS) provides numerous options for printing labels and /or postage using online resources. This convenience also allows you to have the shipment picked up by our local USPS carrier as outbound mail.

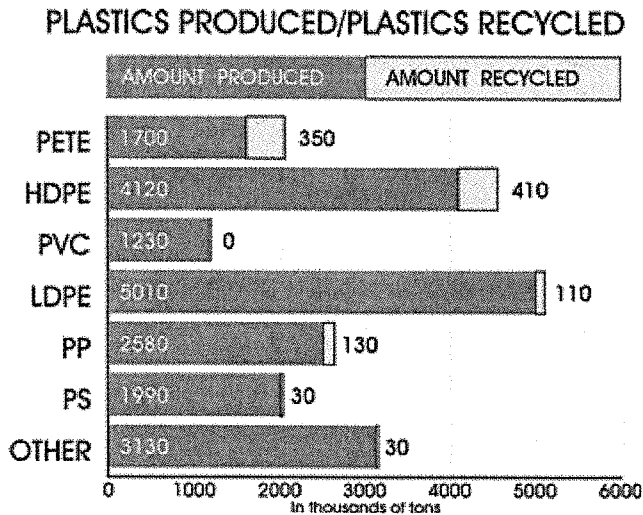
EPS can be identified by the number 6 plastic resin identification code. Many types of foam plastic are not clearly marked; if you have questions please contact AFPR at 410.451.8340 for clarification. For information on #6 Arcel foam recycling please call AFPR at 410-451-8340. To obtain information about other recycling opportunities, including foodservice, rigid durable goods and other plastics, please check the [U.S. & Canadian Recycled Plastic Markets Database](#). For loose fill "peanut" recycling please visit the [Plastic Loose Fill Council](#) or call the Peanut Hotline at 800.828.2214.

The information contained herein is subject to change and is provided without any express or implied warranty as to its truthfulness or accuracy. The Alliance of Foam Packaging Recyclers does not endorse the products or processes of any individual manufacturer or recycler.

[[Recycling Info Resources](#) | [Environmental Accolades](#) | [EPS Physical Properties](#)]
[[EPS Packaging Suppliers](#) | [EPS Industry News](#) | [International Packaging Regulations](#)]
[[FAQs](#)]

Recycling

More than 15 million tons of Polystyrene "PS" (aka Styrofoam) is produced each year, but less than 2% is recycled (see chart). Styrofoam can not be practically recycled, it can not be composted, and it is **never biodegradable**.



“In recent years, several plastics recycling companies have closed their doors. They claimed they could not sell their products at a price that would allow them to stay in business. Thanks to the relatively low cost of petroleum today, the price of virgin plastic is so inexpensive that recycled plastic cannot compete. The price of virgin resin is about 40 percent lower than that of recycled resin.

Because recycled plastic is more expensive, people aren't exactly lining up to buy it. Surveys conducted by Procter & Gamble and others show that while most people expect their plastic to be recycled, they won't go out of their way or pay a few cents more to buy a bottle made of recycled plastic.”

Source: Hawaii Food Industry Association website -

<http://www.eia.doe.gov/kids/energyfacts/saving/recycling/solidwaste/plastics.html>

LATE TESTIMONY

My name is Monty Richards and I am from Kahua Ranch on the Big Island.

I am testifying in support of SCR 134, which encourages buying local for sustainability.

I have been a cattle rancher for over 50 years in Hawaii. Currently about 80% of cattle are being shipped to the mainland for slaughter and distribution. We would like to begin to do more of the processing and distribution here in the state of Hawaii. There is a crying need for meat in the state and in the schools. It simply does not make sense, particularly in light of rising fuel costs and environmental concerns.

Thank you for your consideration to this matter.

A handwritten signature in black ink, appearing to read "Monty Richards", with a long, sweeping flourish extending to the right.