

March 19, 2008

PLASTIC BAG NEWS ARTICLES

The following are a sampling of recent news articles regarding plastic bags that may be of interest to stakeholders.

Tide turns against use of plastic bags

By Judy Keen, USA TODAY

Massachusetts is considering taxing them. Reno is talking about banning them. Plastic shopping bags are increasingly popular targets of governments looking for ways to help the environment.

"It's a small, simple, modest act that makes people feel that they're actually contributing" to reducing litter, waste and dependence on foreign oil, says Supervisor Ross Mirkarimi, sponsor of San Francisco's ban on petroleum-based plastic bags in big grocery stores.

Since that ban — the USA's first — took effect in November, he says, there's been a noticeable decline in plastic-bag litter and "a sea change in the habits of consumers," many of whom now tote reusable bags.

New York City and California require some retailers to recycle plastic bags. Industry groups such as the American Chemistry Council prefer that approach. Plastic bags require at least 40% less energy to make than paper and produce less than half the greenhouse gases, says ACC's Sharon Kneiss. Plastic bags can be recycled into construction materials, decking and more bags, she says.

The group says Americans use about 90 billion plastic bags a year. Paper bags are easier to recycle, the Sierra Club says, and the equivalent of 11 barrels of oil is saved for every ton of plastic bags reused or recycled. It recommends reusable bags.

Ireland started taxing plastic bags in 2002; within weeks, usage dropped more than 90%. China's ban on free plastic bags takes effect June 1. In the USA:

- Massachusetts state Sen. Brian Joyce introduced a bill that would charge consumers 2 cents for every plastic bag, gradually increasing to 15 cents over seven years. Half the revenue would go to the store to improve consumer awareness and half would go to state recycling programs. "It's designed to be a gentle nudge to consumers to change their behavior," he says.

- Connecticut is considering a bill that would fine retailers up to \$1,000 if they use non-biodegradable plastic bags beginning in 2010. Stan Sorkin, executive director of the Connecticut Food Association, says his group "is really pushing mandatory recycling programs for plastic bags" instead.

- In Reno, city environmental services administrator Jason Geddes is researching options that include a ban and recycling incentives. "There's a lot of interest and ... community buzz," he says.

- In Maryland, legislation that would ban plastic bags in all grocery stores might not make it out of committee this session, but its sponsor, Delegate Todd Schuler, says he'll reintroduce it. "It's going to be a long campaign," he says.

- An energy committee in Valparaiso, Ind., is considering ways to reduce plastic-bag usage, including the possibility of a small tax. "Those bags are made from petroleum-based products and they travel a lot of miles to come to us and we use them in abundance," committee member Ann Kenis says.

Santa Monica a step closer to banning plastic bags

Los Angeles Times -- February 27, 2008

Santa Monica will likely see fewer plastic bags floating around its streets and beaches soon. Last night, the Santa Monica City Council voted to draft an ordinance banning one-use plastic and biodegradable plastic-like bags in city businesses.

All retail locations in Santa Monica, regardless of type or size, will have to go plastic bag free and offer reusable bags for sale instead. The ban would apply only to the plastic bags given out at point-of-sale, not the flimsier bags found in the produce or bulk sections of supermarkets. Paper bags -- which the staff pointed out is not a significant source of marine pollution -- will still be allowed -- but the city council asked its staff to come back with recommendations on charging a fee on these bags.

The plastic bag ban had more or less unanimous support from both the members of the City Council and the community members who spoke at the meeting. Many spoke about marine pollution caused by plastic bags -- from getting tangled in them while surfing to seeing the eyesore crated by them on the beaches.

In contrast to the plastic bag ban, the paper bag tax raised a number of questions and concerns including outright opposition from Council member Robert Holbrook, who said "I just think they out to be free." Some felt that the paper bag tax should not be charged for food take-out, fast food places, or grocery deliveries -- businesses where reusable bags are not an easy solution. In addition, questions remained as to what the minimum charge per paper bag would be, and where the money would go.

Staff recommendations regarding those questions -- as well as a drafted ordinance for a plastic bag ban -- will come back to the City Council. Once the plastic ban is drafted and passed, businesses will likely have at least a 6-month transition period before the ordinance is allowed to take effect.

Santa Monica's anti-plastic bag ordinance will be much stricter than the one passed by the L.A. County Board of Supervisors last month, which called for a voluntary effort. You can watch the City Council proceedings [here](#), or read the staff recommendations for the ordinance [here](#).

Bring your own bags

New city program designed to encourage reusable bags

By Melanie Carroll / Daily News Staff Writer

<http://www.paloaltdailynews.com/article/2008-2-24-bags>

Palo Alto aims to reduce the number of plastic and paper bags shoppers use through a new campaign designed to encourage people to bring their own reusable bags.

The so-called BYOBag! campaign already has some retail outlets signed on to the pilot program that will give stores free advertising in exchange for their participation.

"Protecting the earth's resources is a great concern of mine. Global warming is real, yet we tend to become complacent, forgetting to recycle and reuse," said Dennis Garcia, owner of the College Avenue JJ&F Market, in a prepared statement. "Protecting the environment needs to begin somewhere. By supporting and participating in the BYOBag! Campaign, our business is making a difference in saving the earth for future generations."

The campaign being coordinated by the Public Works Recycling Program is designed to educate and assist shoppers in halting their use of the single-use bags. For one thing, the rarely recycled plastic bags are a major contributor to an enormous mass of plastic floating in the Pacific Ocean about 1,000 miles west of San Francisco. Scientists estimate it weighs several tons and is roughly twice the size of Texas. Plastic dumped in nearby Bay Area waters can drift out to it. Additionally, paper bags create waste and litter and contribute to greenhouse gas emissions, the city reported.

A survey of Palo Alto shoppers concluded that grocery shoppers use their own sacks less than 10 percent of the time while only 2 percent of pharmacy consumers do the same. Country Sun Natural Foods banned the plastic bags this month while Whole Foods won't use them after April 22 - Earth Day.

Inside JJ&F, the longtime grocer for the Stanford and College Terrace neighborhoods, reusable cloth maroon bags with navy trim are on sale to those who want to avoid paper or plastic. Outside a container filled with thousands of plastic bags collects the white plastic bags that might otherwise end up in a landfill, stuck to a tree branch or in the ocean.

On Saturday afternoon, as raindrops poured from the sky, Terry Fayer carted out groceries in the reusable maroon bags.

Fayer said she's bought them last summer, when they went on sale, in an effort to preserve the environment.

Still, not everyone is as devoted to helping the planet.

"Using canvas bags is ridiculous," said Cole Gordon, who sat with a few friends outside the JJ&F Market on Saturday before the rain started pouring down.

Gordon, who hails from Mississippi, said people from his home state would make fun of anyone carrying groceries in a canvas bag instead of plastic.

His friend Sheyi Ayeni, a San Francisco resident, said most people don't care about avoiding the plastic bags.

Last March, the San Francisco Board of Supervisors banned plastic bags although paper bags are still permitted.

"It's a hassle in life just for one sack" to bring your own bag, Ayeni said.

Shoppers should be given a choice and incentive to use environmentally friendly bags, his friend Will McColl said outside the market.

"I try to use my own bag when possible," McColl said. "People should have the option" to use a sack of their own choice.

Retailers have until March 7 to enroll in the city-sponsored BYOBAG! campaign, which runs from April 1 to Dec. 31. Those who participate will likely offer incentives to customers who use environmentally friendly bags, offer reusable bags for sale and place posters and signs in stores. For more information, go to www.cityofpaloalto.org/BYOBAG.

Plastic bag ban forces closure of factory

China Daily News

Updated: 2008-02-27 07:20

BEIJING -- Huaqiang, China's largest plastic bag manufacturer, has shut because of a national environmental drive that will impose limits on their use starting on June 1, a local source said Tuesday.

The Henan Province-based factory stopped production in mid January and its 20,000 employees were awaiting their fate, said Liu Henglie, the commerce bureau director in Suiping County where the plant is located.

All machines in Huaqiang's two factories in Suiping County and Luohe City are to be sold. Further details about the future of the factories and its workers remained unknown, according to the official.

A notice in front of the Luohe factory on Saturday said "1,600 plastic film blowing machines and over 1,000 packing machines are for transfer. The two factories in Luohe and Suiping are to be transferred at a price of 280 million yuan (US\$39.1 million) to 350 million yuan".

"Our factory stopped production on January 18," said Chen Suhong, a veteran worker at the Luohe factory. "The electricity was cut off when I was on the afternoon shift. Later, our head gave us several days off because of output reduction."

The factories, belonging to the Guangzhou-based Nanqiang Plastic Industrial Ltd., were able to produce 250,000 tons of plastic bags valued at 2.2 billion yuan annually.

A management official was quoted by the local newspaper Henan Business Daily as saying the closure was caused by the environmental drive against the use of plastic bags.

"Over 90 percent of our products are on the limit list," the official said. "As a result, the only way forward for the factory is closure."

An unnamed county official attributed the closure to a new labor law. This entitled staff with more than 10 years of service at a company the right to sign contracts that would protect them from dismissal without cause.

According to the labour law put into effect on January 1, nearly 2,000 Huaqiang staff would be permanent workers of the company, which would increase its human resources costs, the official said.

"The shutdown of Huaqiang is absolutely a big loss to our county," said an official surnamed Cai with the county's bureau of small- and medium-sized companies. "We still want Huaqiang to be here."

"We now have two plans. One is to restore the production through the government's coordination with the Huaqiang headquarters. The other is to change the factory into a joint-stock company and produce degradable plastic bags."

Many of the province's companies are now focusing on recyclable plastics. Henan Tianguan Group, another major plastic producer, has built a product line of degradable plastic with an annual production of 500,000 tons.

The General Office of the State Council, China's Cabinet, on January 9 ordered a ban on the production, sale and use of ultra-thin bags (defined as less than 0.025 millimeters thick) as of June 1. At the same time, supermarkets and shops would be banned from giving free plastic bags to customers.

Retailers urged to take action or face levy to cut plastic bag use

The Scotsman newspaper

ALISTAIR Darling made public his widely expected plan to introduce charges on plastic bags if retailers do not take steps to reduce their use.

The Chancellor said legislation would allow the government to impose a charge on single-use bags early next year, "if we have not seen sufficient progress on a voluntary basis".

In the Budget, he said: "Given the damage that single-use carrier bags inflict on the environment, we want to be able to take action."

The money raised by a plastic bag levy under powers provided by Climate Change Bill legislation would go to environmental charities. It could reduce plastic bag use by 90 per cent, with around 12 billion fewer bags in circulation, Mr Darling said.

About 13 billion plastic bags are given out free to UK shoppers every year and take 1,000 years to decay.

Yesterday's announcement came after campaigns to ban plastic bags, which were endorsed by the Prime Minister.

Last month, Gordon Brown said the government was ready to force supermarkets to reduce use of plastic bags, and hailed retailers such as Ikea for phasing them out last year.

As early as last November, in his first major speech on the environment since becoming Prime Minister, Mr Brown signalled that the days were numbered for throw-away plastic bags. "I am convinced we can eliminate single-use disposable bags in favour of long-lasting and more sustainable alternatives," he told a WWF event.

As the Chancellor made his Budget announcement, the Body Shop became the latest high-profile retailer to take steps to reduce plastic bag use.

The cosmetics chain said it was ending the use of degradable plastic bags from August 2008, and switching to 100 per cent recycled paper bags. Alastair Kerr, the Body Shop UK managing director, said: "We are proud to announce our decision to end the use of degradable plastic bags and to source 100 per cent recycled paper carrier bags, produced to the highest environmental and ethical standards."

Last month, Marks & Spencer announced it was to charge food customers 5p for every plastic carrier bag they use, with the money raised from the levy spent on improving parks and play areas across the country.

And in response to Conservative claims of hypocrisy, even the government's marketing arm – the Central Office of Information – announced it would stop using plastic bags for promotional purposes.

The drive has attracted support from all kinds of retailers, with the charity Help the Aged announcing last week that it was phasing out plastic bags from its 365 second-hand shops around the country, stopping about two million bags finding their way to landfill.

A complete end to handing out bags in its shops will come into effect on 2 June, during National Recycling Week, the charity said.

And Mr Darling's pledge won the backing of the Campaign to Protect Rural England (CPRE). Ben Stafford, the conservation charity's head of campaigns, said: "With limited signs that a voluntary approach to tackling the blight of plastic bags will work, the government is right to flag more robust measures through this Budget."

"Litter is a highly-visible problem that suggests a lack of concern for the state of our towns and countryside."

The Green Party said the only way to achieve a "serious and sustainable" decrease in national levels of plastic bag waste was for the government to introduce a bag tax.

MEET THE WOMAN WHOSE GREAT IDEA IS IN THE BAG

VIVIEN McKee, right is the managing director of Get Serious World – a new Glasgow-based business promoting the use of reusable jute bags.

When she set up her company in October last year Ms McKee knew it was an idea evolved at a perfect time. Her business meant she was delighted to hear Alistair Darling promise to get tough on companies which continue to use disposable plastic bags.

Unless dramatic steps are taken to reduce the number of plastic bags used by British businesses the Chancellor warned he would consider compulsory charges for bags to be introduced in 2009.

Ms McKee, whose company imports jute bags from India and supplies them to businesses so they can be reused by customers, was delighted to hear the Chancellor address the issue so close to her heart.

The Glasgow based businesswoman, who already has a contract with RBS, said: "It is excellent news for us. Retailers are going to be looking at making changes over the next year. It means this country will have to make improvements to bring us into line with the work already being done in places like Denmark and the Republic of Ireland."

She added: "It is a very green Budget. It will be an amazing opportunity for other entrepreneurs to set up businesses with green credentials. It's a huge opportunity."

Last Updated: 13 March 2008 1:49 PM

Peter Garret embarrassed on plastic bag charge

By staff writers

March 16, 2008 01:23pm

Melbourne Herald Sun

- Plastic bag charge is being considered
- Environment Minister embarrassed by transcripts
- Coalition states opposition to move

THE cat was out of the bag on a proposed plastic bag tax despite federal Environment Minister Peter Garrett's denials, Opposition Leader Brendan Nelson says.

Mr Garrett rejected reports shoppers would be forced to pay up to \$1 for plastic bags last week.

But Dr Nelson said it seemed Mr Garrett's own department had prepared proposals of a shopping tax of at least 25c on every plastic bag.

"Now the cat is now out of the bag. Mr Garrett is obviously a man who doesn't know whether he's coming or going," Dr Nelson said in Perth.

A tax on plastic bags would hurt fair dinkum Australian families, who were already battling with high petrol and grocery prices, Dr Nelson said.

"Apart from the economic madness of this, what are people going to do with their dustbins, their dirty nappies and their dog poo?"

"Mr Garrett might live in a different part of Australia but for the rest of fair dinkum Australia we know that these plastic bags are really important ..."

Labor went to last year's election promising to phase out plastic bag use but Mr Garrett said last week a levy was not the way to achieve this.

Garrett embarrassed

But, after The Sunday Telegraph presented Mr Garrett's office with transcripts of his own departmental officials outlining the plan, an embarrassed Environment Minister yesterday conceded the supermarket slug on shoppers was on the table.

The transcripts, from Senate Estimates hearings on February 19, reveal his department had undertaken detailed costings of the plan.

Mr Garrett sought to shut down the story last Sunday by issuing a press release, saying the Government would not be introducing any Commonwealth "levy".

But the transcripts show the Government has been considering both a levy, or tax, and a checkout charge of 25c to \$1 a bag to fulfil its election pledge to phase out single-use plastic shopping bags "using economic instruments".

While Mr Garrett was trying to pretend no such plan existed, it was being confirmed by Environment Department officials at the Senate Estimates hearings.

The Department's First Assistant Secretary in the Environment Quality Division, Mary Harwood, told the hearings four options were on the table for the environment ministers' council meeting on April 17.

She said: "They (the four options) are: a litter amelioration strategy; banning plastic bags outright; applying a mandated retailer charge, or a Commonwealth levy on bags."

Given Mr Garrett has ruled out a Commonwealth levy, and that the litter-reduction plan would not meet Labor's election promise, the Environment Minister is left with two proposals: an outright ban, which is regarded as impractical, or a checkout charge for each bag.

Major retailers have calculated a minimum 25c charge would add an annual \$650 million to the national shopping bill - or at least \$156 for each shopper.

The NSW Government is known to have discussed a charge of as much as \$1 a bag.

Ms Harwood confirmed to the Senate committee that, no matter what decision was made, eradication of plastic bags would cost consumers.

After being presented with Ms Harwood's testimony, a spokeswoman for Mr Garrett confirmed a checkout charge was on the agenda for the April 17 ministerial council meeting.

"All environment ministers - state, territory and commonwealth - will sit down on April 17 to consider these options and the associated benefits and costs," she said.

"The Minister will not speculate on what the outcomes of that discussion will be, but he's made it clear this Government will not support or introduce a Commonwealth levy on plastic bags," she said.

"We don't favour a Commonwealth tax or levy. We don't see the phase-out of plastic bags as a revenue-raising exercise for the Commonwealth. Working families want a sensible approach that delivers for them and for the environment.

"The fact is, plastic bags have a documented impact on the environment and we have a ready replacement in re-usable green or calico bags."

The Australian National Retailers Association has condemned the plan for a checkout charge.

"Imposing an extra cost on consumers for bags they already use responsibly can't be justified," ANRA CEO Margy Osmond said.

Britain last week moved to implement its own plastic bag charge. Finance Minister Alistair Darling said legislation would be introduced to impose a charge on single-use carrier bags unless retailers took action voluntarily.



City Council Report

City Council Meeting: February 12, 2008

Agenda Item: _____

To: Mayor and City Council
From: Craig Perkins, Director - Environmental and Public Works Management
Subject: Recommendations Regarding a Ban on Plastic Bags for Commercial Establishments in Santa Monica

Recommended Action

Staff recommends that City Council:

- 1) direct the City Attorney to draft an ordinance banning the free distribution to customers of single use plastic (including biodegradable plastic) carryout bags at stores within Santa Monica; and
- 2) provide staff with direction on a proposal to require retailers to charge a fee on single use paper bags in addition to the ban on plastic bags.

Executive Summary

This report presents the results of a staff analysis, requested by City Council on October 9, 2007, to generate recommendations to develop an effective ban on single use plastic carryout bags in Santa Monica. The analysis determined that plastic bags are responsible for significant negative environmental impacts and that preferable alternatives are readily available and currently in use. Because California Assembly Bill 2449, which went into effect on July 1, 2007, specifically prohibits local governments from imposing a fee on plastic carryout bags, it was determined that the most effective way to reduce the environmental impacts related to plastic bags (including biodegradable plastic) is to ban their use in Santa Monica and promote the use of reusable carryout bags. Single use paper carryout bags should be allowed as an alternative to plastic bags, but should be required to meet certain requirements to minimize the environmental impacts related to their manufacture and transportation. It is recommended that the ordinance provide at least six months prior to taking effect following Council adoption to allow stores to transition. Staff seeks direction from Council on a proposal from the Task Force on the Environment that would require stores to impose a fee on single use paper bags in addition to the ban on plastic bags. The intent of this proposal would be to accelerate a shift away from single use bags towards reusable bags. Budgetary impacts from the adoption of a ban would include costs to prepare and distribute outreach materials for use by stores affected by the ordinance, and staffing costs for implementation and enforcement. Staff estimates that

approximately \$60,000 per year in supplies and materials and a .5 FTE Administrative Analyst position will be needed to assist stores with compliance prior to the ordinance taking affect, and to develop an ongoing outreach campaign to encourage shoppers to bring their own reusable bags.

Background

On July 16, 2007, the City's Task Force on the Environment unanimously approved a motion requesting that City Council consider banning plastic bags, citing concerns that plastic bags create significant litter problems; that they pollute the beach and marine environments; because they are expensive and difficult to recycle; and because they contaminate other recyclable and compostable material that is collected by the City. On October 9, 2007, City Council directed staff to perform an analysis and generate recommendations to develop an effective ban on plastic bags for commercial establishments in Santa Monica. This report transmits the results of that analysis and recommended actions.

Environmental Issues Associated with Plastic Bags

Plastic carryout bags were first introduced by retail stores in the United States in 1975 and began to be distributed to customers at the point of sale in supermarkets in 1977. Today these bags are ubiquitous in the marketplace because they are light-weight, strong, inexpensive and convenient.

Plastic carryout bags are made in a number of different sizes and thicknesses and are typically manufactured from either high density polyethylene (HDPE - recycling symbol #2) or from low density polyethylene (LDPE - recycling symbol #4). The LDPE bags are thicker and are generally used by department stores and other commercial retail outlets. The HDPE bags are typically thinner, cheaper and are used much more widely by supermarkets, pharmacies, convenience stores and restaurants. These bags are termed "single-use" bags because they are intended for one time use for customers to carry their purchases from the store, followed by disposal or recycling. The thin, light duty plastic that the bags are made from is not durable enough for them to be

repeatedly used for carryout. The California Integrated Waste Management Board (CIWMB) estimates that Californians use approximately 19 billion of the light weight HDPE bags each year¹, with approximately 6 billion of these being consumed within Los Angeles County. A survey conducted by City Solid Waste Management division staff in December 2005 solicited plastic bag information from 25 Santa Monica grocery stores and food markets. The survey concluded that these 25 businesses use approximately 23 million plastic bags each year.

Plastic bags are a significant component of litter in the environment primarily due to their durability and light weight. Even when disposed of properly, plastic bags are often blown out of trash receptacles and are easily carried by wind and water to become entangled in vegetation, clog stormdrains and contribute to free floating plastic debris in the marine environment. A waste characterization study conducted by the City of Los Angeles in June 2004 found that plastic bags made up 25% by weight (and 19% by volume) of litter found in 30 storm drain catch basins². Recently the Los Angeles Regional Water Quality Control Board (LARWQCB) established a Zero Trash TMDL (total maximum daily load) for the Ballona Creek Watershed. This TMDL requires a 10% annual reduction of trash entering the water body until zero trash is reached by 2014. Santa Monica, as one of the agencies within the Ballona Creek watershed, can be held jointly liable for failing to meet these targets and will likely have to spend increasing amounts of money to comply with these requirements in the coming years.

Plastic bags are a significant source of marine debris and are hazardous to birds and marine animals. The California Coastal Commission estimates that 60% to 80% of all marine debris, and 90% of all floating debris is plastic. Plastic bags do not biodegrade in the environment, but they do break into smaller pieces that are often mistaken for food by birds and marine animals³. Studies have estimated that more than 1 million sea

¹ California Integrated Waste Management Board, Resolution, Agenda Item 14, June 12, 2007 Board Meeting

² "An Overview of Carryout Bags in Los Angeles County", staff report to the Los Angeles County Board of Supervisors, August 2007

³ C. Moore, "Pelagic Plastics", Algalita Marine Research Foundation, www.algalita.org/pelagic_plastic.html

birds, 100,000 marine mammals and countless fish die annually through ingestion of and entanglement in marine debris, including plastic bags⁴.

Plastic bags are recyclable, however very few are actually recycled. Research conducted by the County of Los Angeles in 2007 found that this is largely due to the logistics of sorting, high contamination rates that reduce the quality of the recycled resin produced, the low quality of plastic used in the bags, and the lack of cost efficiency due to lack of suitable markets for the recycled resin. Various estimates suggest that only 1% to 5% of the 19 billion bags used annually in California are being recycled in any way⁵. A recent survey by the County of Los Angeles found that only 25 of the 89 jurisdictions within the County offer residential curbside collection for plastic bag recycling. The City of Santa Monica does provide curbside collection of plastic bags, but does not encourage it because the bags are often contaminated by the time they reach the City's transfer station, and because the bags create litter and handling issues at the transfer station. A Los Angeles County survey of recycling and material recovery facilities found that over 90% of the plastic carryout bags taken to these facilities were not recycled but instead taken to landfills for disposal. Reasons cited include high contamination rates, the tendency of the bags to jam the screens used to separate materials, and the lack of suitable markets for the recycled material.

Plastic Bag Costs and Alternatives

The primary alternatives to HDPE plastic carryout bags are single use paper carryout bags, biodegradable (starch-based) plastic carryout bags, and reusable carryout bags made from cloth or durable plastic. All of these options are widely available in the marketplace and are currently being used throughout the region and the state at grocery stores, restaurants and other retail stores. The approximate costs of plastic bags and

⁴ N. Wallace. "Debris Entanglement in the Marine Environment: A Review" pp 259-277 in Proceedings of the Workshop on the Fate and Impact of Marine Debris, U.S. Department of Commerce, NOAA Technical Memorandum, 1985

⁵ Californians Against Waste http://www.cawrecycles.org/issues/plastic_campaign/plastic_bags : and US EPA 2005 Characterization of Municipal Solid Waste, Table 7

various alternatives (based on current prices obtained from a variety of bag suppliers in December 2007) are listed below in Table 1.

Table 1

Type of carryout bag	Approximate cost per bag	Approximate annual usage per person
HDPE plastic	1 to 5 cents	500 - 600
Paper	5 to 25 cents	500 - 600
Biodegradable	10 to 21 cents	500 - 600
Reuseable (cloth or plastic)	99 cents to \$10	2 - 4

Environmental Issues Associated with Alternatives to Plastic Bags

The primary environmental impacts of carryout bags fall in to two areas: 1) the impacts related to the manufacture, transportation and consumption of the bags, and 2) the end of use impacts related to the disposal of the bags, recycling and recyclability, and litter.

A study published by the Australian Department of the Environment and Heritage in 2002⁶ evaluated the life cycle environmental impacts of plastic carryout bags and alternatives. The study found that reusable bags made of polypropylene have the least overall environmental impact, largely due to the small number of bags consumed per year. The study found that single use plastic bags have a lower embodied energy content than both biodegradable bags and paper bags, due to their light weight which facilitates transportation, and lower material use in manufacture. However the end of use impacts related to plastic bags are significant, as described in detail above. The end of use impacts of paper bags are much lower than for plastic bags because 1) paper bags are less likely to be littered due to heavier weight, 2) they are readily recyclable and universally collected in curbside recycling programs, and 3) they will biodegrade in

⁶ Australian Department of the Environment and Heritage Plastic Shopping Bags – Analysis of Levies and Environmental Impacts Final Report, prepared by Nolan-ITU, December 2002

the marine environment, minimizing negative environmental impacts. The end of use impacts for biodegradable plastic bags is mixed. These bags can be composted, along with green waste, at the commercial composting facility used by the City of Santa Monica; however, they do have the potential to contaminate plastic recycling programs because they are easily mistaken for plastic bags unless clearly identified as biodegradable. And like plastic bags, they are designed for single use and have similar characteristics that contribute to their likelihood to become littered and end up in the marine environment. While they may partially biodegrade in the marine environment over the course of several months, they still have the potential to negatively impact marine life.

On balance, the Australian study found that the greatest environmental benefits when evaluating manufacture, transportation, use and disposal of carryout bags are achieved when replacing single use disposable bags with reusable bags. Of the single use bags, paper bags have a much lower impact on the marine environment than plastic or biodegradable bags; however, they require more resources to manufacture and transport. Paper bags containing high levels of post-consumer recycled content would lessen the resource load of these bags.

Regulation of Plastic Bags in other Jurisdictions

Internationally there have been many bans or other regulation on single-use plastic carryout bags, primarily in response to litter and marine pollution issues. The countries of Taiwan, Kenya, Rwanda, Bangladesh, Germany and Sweden, as well as thirty towns in Alaska, have all banned the use of plastic carryout bags in recent years. In January 2008 the Chinese government announced a nationwide ban on the free distribution of single-use plastic carryout bags which will take effect on June 1, 2008. Ireland, Denmark and Switzerland have all instituted a “tax” on plastic carryout bags to encourage the use of alternatives. The program in Ireland, which imposed a fee of 20 cents (Euro) on each plastic carryout bag consumed, resulted in a 95% reduction in the

use of the plastic bags since the fee was imposed in March 2002⁷. Follow up studies of this policy in Ireland indicate that it has been very effective at changing consumer behavior and the use of reusable bags by consumers in Ireland is now commonplace.

In 2002, the Australian federal government began a voluntary initiative to reduce the consumption of HDPE plastic carryout bags by 50% and plastic bag litter by 75% by December 2005. Follow-up studies found that the voluntary efforts resulted in significant reductions in plastic bag consumption (up to 45%) but that they did not appear to have had a noticeable impact on litter with the levels remaining approximately the same⁸. A report by Australian retailers indicated that plastic bag recycling rates increased to 14%, but noted that the retailers spent \$50 million on public education efforts over two years and that “the majority of consumers have yet to alter their behavior.”⁹ In January 2008 the Australian federal government announced that it plans to completely phase out the use of plastic carryout bags by the end of 2008, in part because the voluntary program has not achieved the desired results.

Within California, the cities of San Francisco and Oakland have recently banned the distribution of non-biodegradable plastic carryout bags in response to negative environmental impacts, litter problems and recycling issues related to plastic bags. San Francisco adopted its ordinance on March 22, 2007, banning the distribution of non-biodegradable plastic carryout bags. This followed the failure by supermarkets in the City to meet agreed upon targets for reducing plastic bag consumption by consumers under a voluntary program. The San Francisco ordinance requires all supermarkets (with gross annual sales of more than \$2 million) and all retail pharmacy chains with at least 5 stores under the same ownership within the City to provide their customers with one or more of the following: 1) biodegradable carryout bags (that include the words “green cart compostable” and “reusable” and display a solid green line encircling the

⁷ <http://www.environ.ie/en/Environment/Waste/PlasticBags/News/MainBody.3199.en.htm>, May 2007

⁸ “Consultation Regulatory Impact Statement: Investigation of Options to Reduce the Environmental Impact of Plastic Bags”, Environment Protection and Heritage Council, January 2007

⁹ http://www.ephc.gov.au/pdf/Plastic_Bags/ANRA_Report_to_EPHC_Chair_22_May_2006.pdf

bag; 2) paper carryout bags (that do not contain old growth fiber, are 100% recyclable and contain at least 40% post consumer recycled content); 3) reusable bags made from cloth or from durable plastic greater than 2.25 mils thick. The ordinance went into effect on November 20, 2007. The City of Oakland adopted a similar ban on July 17, 2007, which was scheduled to take effect on January 17, 2008. Oakland's ordinance applies to all stores generating \$1 million or more in annual sales with the exception of restaurants. In August 2007, the City of Oakland was sued by the Coalition to Support Plastic Bag Recycling which argued that the City failed to complete an environmental impact report as required by CEQA before adopting its ordinance. In response to the lawsuit, the City of Oakland has agreed not to enforce its ordinance until the suit is resolved. A hearing is scheduled for January 29, 2008.

Within Southern California, the County of Los Angeles Board of Supervisors voted on January 22, 2008 to ban the free distribution of single use plastic carry out bags in unincorporated areas of the County if voluntary programs by retailers in those areas to reduce plastic bag use do not result in decreases of at least 30% by July 2010 and 65% by July 2013.

Assembly Bill 2449

On September 30, 2006, Governor Schwarzenegger signed into law AB 2449 which regulates plastic carryout bags statewide. The new law went into effect on July 1, 2007, and requires the operators of supermarkets and retail businesses greater than 10,000 square feet with a licensed pharmacy to establish an in-store recycling program that provides an opportunity for a customer of the store to return clean plastic carryout bags to that store. The law requires a plastic carryout bag provided by a store to have specified information printed or displayed on the bag, and requires the placement of a plastic carryout bag collection bin in each store greater than 10,000 square feet that is visible and easily accessible to the consumer. The regulated stores must send these collected bags for recycling. The law also requires the operator of a store to make reusable bags made from cloth, fabric or plastic with a thickness of 2.25 mils or greater

available to customers for purchase. The law requires manufacturers of plastic carryout bags to develop educational materials to encourage the reducing, reusing, and recycling of the bags and to make the materials available to stores. The law did not establish at-store recycling or consumption goals; however, in June, 2007, the California Integrated Waste Management Board (CIWMB) adopted emergency regulations establishing reporting requirements to aid in evaluating the effectiveness of the law¹⁰.

AB 2449 specifically prohibits a city, county, or other public agency from adopting, implementing, or enforcing an ordinance, resolution, regulation, or rule that requires a store to collect, transport, or recycle plastic carryout bags or conduct additional auditing or reporting, or imposing a plastic carryout bag fee upon a store. The law does not prohibit a public agency from banning plastic bags outright. The law will remain in effect through January 1, 2013, when it is scheduled to sunset.

Discussion

Based on the research reviewed and summarized above, single use plastic carryout bags generate significant negative environmental impacts because:

- they are consumed in extremely high volumes
- they are produced from non-renewable resources
- they are designed to be disposable (rather than reusable)
- they are difficult to recycle
- they are a significant and very visible component of litter
- they do not biodegrade in the environment
- they represent a significant hazard to marine animals and birds

Single use alternatives to plastic carryout bags include paper bags and biodegradable plastic bags. Of these, paper bags are the best alternative from a marine environment and litter perspective. They are made from renewable resources, are readily recyclable, are widely available and are currently used in most retail stores throughout Santa

¹⁰ California Integrated Waste Management Board, Resolution, Agenda Item 14, June 12, 2007 Board Meeting

Monica and the region. However, they are more expensive than plastic bags and require more resources to manufacture and transport than plastic bags. Biodegradable bags present many of the same environmental litter and marine environment problems as plastic bags, and they can contaminate plastic recycling waste streams. While they are compostable and are made from renewable resources, they are relatively expensive and are somewhat resource intensive in their manufacture. From an overall environmental and economic perspective, the best alternative to single use plastic carryout bags is a major shift to reusable bags.

As noted above, government agencies worldwide have taken numerous actions to address the significant problems with plastic bags in recent years. These actions fall into three main categories:

1. Voluntary programs (on the part of retailers) to reduce bag use and increase recycling of bags
2. Plastic bag fees or “taxes”
3. Plastic bag bans

Of these actions, voluntary programs are demonstrably the least effective at reducing the use of plastic bags. A voluntary program in San Francisco in 2006 was not effective in reaching City-mandated reduction targets, and led the City to adopt a ban in March 2007. A nationwide voluntary program in Australia begun in 2002 resulted in moderately increased recycling rates of plastic bags but had no effect on reducing litter and had little positive influence on consumer behavior despite an expenditure of over \$50 million for public outreach on the program.

Both voluntary and mandatory plastic bag fees and taxes have proven to be very effective at significantly reducing the amount of plastic bags consumed, provided that the fees are high enough to provide an incentive for consumers to alter their behavior. A voluntary fee program implemented by a supermarket in Byron Bay, Australia

beginning in 2002 resulted in an 83% reduction in plastic bag use¹¹. A voluntary bag fee program begun by the retail company IKEA in Australia in 2002 and in England in 2006 resulted in 95% to 97% reduction in plastic bag consumption¹². IKEA began a similar program at its stores in the United States in March 2007. None of these voluntary initiatives resulted in decreases in sales at the stores where they were implemented. And as noted above, the mandatory plastic bag fee initiated in Ireland in March 2002 resulted in a 95% reduction in plastic bag consumption.

Based on the negative environmental impacts related to single use plastic bags, staff recommends that City Council direct the City Attorney to draft an ordinance banning the free distribution to customers of single use plastic carryout bags at stores within Santa Monica. The ordinance would only apply to bags distributed at the point of sale and would not apply to plastic bags used for produce and other bulk items in stores. Staff recommends that single use biodegradable plastic bags be included in this ban because they present many of the same environmental litter and marine environment problems as plastic bags, and they can contaminate plastic recycling waste streams. The ordinance should specify that single use paper carryout bags are acceptable alternatives provided they do not contain old growth fiber, are 100% recyclable, and contain a minimum of 40% post consumer recycled content. In order to minimize the use of single use bags, the ordinance should require all affected stores to provide reusable carryout bags for sale and, with assistance from the City, promote their sale and use. The ordinance should provide at least 6 months prior to taking effect following Council adoption to allow stores to transition.

Staff also requests that City Council provide direction on a recommendation unanimously adopted by the Task Force on the Environment on December 17, 2007. The Task Force recommends that in addition to banning single use plastic carryout bags, the ordinance should require stores to impose a fee on single use paper bags,

¹¹ Australian Department of the Environment and Heritage Plastic Shopping Bags – Analysis of Levies and Environmental Impacts Final Report, prepared by Nolan-ITU, December 2002

¹² http://www.treehugger.com/files/2007/02/ikea_us_to_bag.php

which would be collected and retained by the store. The intent of the fee would be to discourage the use of single use bags and accelerate a switch by consumers to reusable bags. Staff believes that such a fee would be allowed under the terms of AB 2449 and, if it was set at a sufficient level, would likely be effective at influencing a significant shift in consumer behavior away from single use bags in favor of reusable bags.

Staff has not investigated the volume of plastic bags distributed by various sizes and types of stores; however, bans in San Francisco and Oakland address only large grocery stores and pharmacies. Based on personal conversations with staff in the cities of Oakland and San Francisco, these types of stores appear to be the highest volume distributors of single use plastic carryout bags by a large margin. If Council approves this recommendation, staff will conduct additional research into the volume of plastic bags distributed by various outlets and use that information to determine the scope of the draft ordinance for Council review and approval.

Policy Alternatives

Alternatives to the recommended actions include 1) impose a ban on single use plastic carryout bags only if certain plastic bag recycling targets are not reached by stores in Santa Monica by a certain date; and 2) take no action. Based on review of plastic bag diversion and recycling programs implemented by the stores distributing the bags, these types of programs are not effective at significantly increasing recycling rates or reducing litter, even with large, well funded campaigns. It is not likely that this option would be successful in significantly reducing the environmental impacts of single use disposable plastic bags. Option 2 would require the City to rely on the existing AB2449 legislation, which doesn't include any targets for diversion or recycling of single use disposable plastic bags. Approving this option would likely have little to no impact on reducing environmental impacts of plastic bags in Santa Monica.

Financial Impacts & Budget Actions

The primary budgetary impacts from adoption of the recommended ordinance would include costs to prepare and distribute outreach materials for use by stores affected by the ordinance, and staffing costs for implementation and enforcement. Staff estimates that approximately \$60,000 per year in supplies and materials and a .5 FTE Administrative Analyst position will be needed on a permanent, ongoing basis to assist stores with compliance prior to the ordinance taking effect, and to develop an ongoing outreach campaign to encourage shoppers to bring their own reusable bags. The estimated annual cost, including benefits, for the half-time Administrative Analyst position is \$52,053 for FY 2008-09. If Council directs staff to prepare an ordinance, a final fiscal impact analysis and recommendations will be presented to Council for review and action at the meeting for the first reading of a proposed ordinance. This will include additional detail regarding the costs and staffing impact of enacting ban on single use disposable plastic carryout bags. All efforts would be made to combine enforcement activities with existing on-site inspections currently conducted by City staff.

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Approved:

Forwarded to Council:

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Attachments