STAFF REPORT

ITEM NO. 13

CITY OF OCEANSIDE

DATE: June 20, 2012

TO: Honorable Mayor and City Councilmembers

FROM: Water Utilities Department

SUBJECT: **APPROVAL OF THE CITY OF OCEANSIDE ZERO WASTE STRATEGIC RESOURCE MANAGEMENT PLAN**

SYNOPSIS

Staff and the Integrated Waste Commission recommend that the City Council approve the City of Oceanside Zero Waste Strategic Resource Management Plan (Exhibit A), and direct staff to implement the elements of the Plan beginning in FY 2012-2013.

BACKGROUND

On August 25, 2010, the City Council adopted Resolution No. 10-R0636-1 calling for a 75 percent diversion rate by 2020, 25 percent over the present State AB 939 mandate and directed staff to develop a Zero Waste Strategic Resource Management Plan (Zero Waste Plan). The Plan supports Zero Waste as a goal to eliminate waste and pollution by the manufacture, use, storage, and recycling of materials. In addition, building upon the success of AB 939, State Mandate AB 341 was recently enacted in 2011, to establish a statewide 75 percent diversion goal by 2020, further supporting our City's efforts to meet this threshold through implementation of the Plan. Once the plan is fully implemented, the City should be able to achieve diversion higher than 75 percent.

In May 2011, the Water Utilities Department awarded a contract in the amount of $30,500 to Zero Waste Associates to assist with the ongoing development of the Zero Waste Plan. Under the guidance of City staff and the Integrated Waste Commission Zero Waste subcommittee, the consultants reviewed all City programs and resources associated with waste reduction efforts, reviewed both current and pending regulations, as well as existing waste and recycling-related contracts.

Over 100 stakeholders and interested citizens provided detailed input from four public meetings in November 2011. The public meetings were found to elicit the best ideas from stakeholders on how to get to Zero Waste, and how residents and businesses could save money by discarding less. All major partners including, but not limited to, Waste Management, Agri Service, and Moody's were all given the opportunity to review and provide detailed input to the Plan.

Oceanside has already achieved a remarkable 67 percent diversion rate through an array of conservation and recycling programs and 75 percent or higher diversion rate is highly feasible upon implementation of this Plan. The Zero Waste Plan details policies and programs designed to reduce waste first, reuse and repair products as many times as possible, and then recycle or compost the rest.

ANALYSIS

The purpose of the Plan is to recommend specific policies, programs, and facilities that should be pursued to help the City achieve its goal of 75 percent diversion or higher, including changing the culture, reduce and reuse recycling, composting and proper handling of special discards. The Plan includes an implementation schedule for FY 12/13, for years 2-5, and for years 6-10. Finally, detailed policies and case studies are highlighted in a separate document with 18 Appendices.

Overall, for Oceanside to get to 75 percent by 2020, landfill diversion of another 15,000 tons per year will be required. Based on the analyses in this Plan, this can be achieved through successful implementation of three programs:

- New single-stream (single container) recycling program
- Expanded education and outreach for reuse
- Implementation of California's new mandatory commercial recycling law (AB 341)

To achieve diversion beyond 75 percent, the plan recommends implementation of an expanded residential and commercial composting program. An expanded emphasis on food donations and home composting is anticipated to dramatically reduce the costs of implementing compost programs in Oceanside.

Implementation of reuse programs cited in this Plan is expected to increase the number of jobs available locally. Each year, Oceanside discards 125,000 tons of materials with a market value of $8 million. One quarter of this value is from reusable products and packaging, all of which can be recaptured and resold into the market, or phased out of production. Policies like environmentally preferable purchasing and extended producer responsibility will further support the development of green jobs in the area, while getting producers to take back difficult-to-recycle products and packaging, ultimately reducing disposal and maintenance costs to the City.

Initial implementation of this Plan will require that the City first meet requirements established by the State's new AB 341 mandatory commercial recycling mandate. Under this mandate, commercial and public entities generating 4 cubic yards or more of solid waste and multifamily complexes with 5 units or more, are subject to mandatory recycling. The mandate, which goes into effect July 1, 2012, will require City staff to work with their waste haulers to implement a program that includes extensive education in the commercial sector, a potential change to our existing solid waste code, monitoring to ensure compliance, and accurate reporting to the State on an annual basis.

Over the first Phase of the Plan (years 1-5) the Solid Waste Ordinance will also require other changes related to the new automated solid waste and recycling services, as well as changes to support policies recommended in this plan, such as environmental-

preferable purchasing, single-use bag reductions, construction and demolition recycling, and organic materials management. City waste audits and commercial inspections will be increased by City staff to accommodate compliance monitoring supported in the Plan, and required in the new state commercial recycling mandate. Implementation will further require that efforts be made to expand education and outreach opportunities established in the Green Oceanside campaign and to engage community participation throughout all sectors. School composting programs and at home composting programs are recommended to be expanded immediately to support greater diversion of organic materials out of landfills. In the later part of Phase 1 and into Phase 2, staff will work with the City's major waste processing and hauling partners to evaluate options for greater reuse opportunities and curbside and commercial food scrap diversion.

FISCAL IMPACT

The total estimated cost for annual implementation of the Zero Waste Strategic Resource Management Plan is $175,000; the bulk of which includes increased residential and commercial sector public education, other waste-reduction program costs associated with placement of public recycling containers, composting materials, increased workshops, waste audits, technical assistance, and outreach. These costs roughly match what is in the proposed FY 12/13 Water Utilities Department budget associated with the current Solid Waste and Recycling Program.

Facility recommendations made in Phase II of the Plan (2017-2022), regarding food scrap diversion and resource recovery parks, could require additional capital investments made by the City's partners and amortized over the life of existing and future contracts.

Staff recognizes that it is Council's goal to explore green waste disposal and reuse options. Staff will explore alternatives and costs in the coming years and will bring forward any proposals for Council consideration and adoption.

CITY ATTORNEY'S ANALYSIS

City Attorney analysis does not apply.

COMMISSION OR COMMITTEE REPORT

The Integrated Waste Commission reviewed and approved staff's recommendation at its March 27, 2012 meeting.

RECOMMENDATIONS

Staff and the Integrated Waste Commission recommend that the City Council approve the City of Oceanside Zero Waste Strategic Resource Management Plan (Exhibit A), and direct staff to implement the elements of the Plan beginning in FY 2012-2013.

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Teri Ferro, Financial Services Director

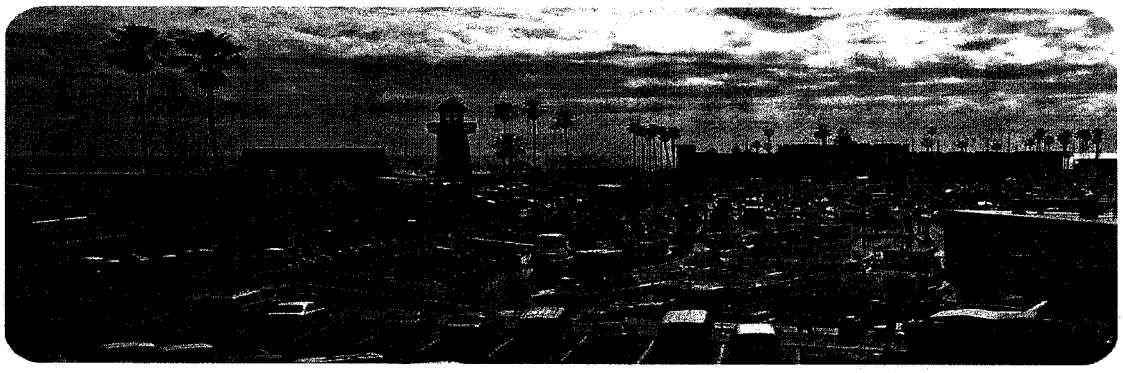
Exhibit A: Zero Waste Action Plan and Appendices
Exhibit B: Recommendations

Exhibit A

Zero Waste Strategic Resource Management Plan

for the City of

Oceanside, California



Zero Waste Associates

A partnership of **Richard Anthony Associates**
and **Gary Liss & Associates**
with Support from
Hidden Resources and
Zero Waste San Diego

Road to ZERO Waste

Green Oceanside

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1. Executive Summary

On August 25, 2010, the Oceanside City Council unanimously passed a resolution to develop a Zero Waste Strategic Resource Management Plan (ZW Plan).[1] This resolution calls for 75% waste diversion by 2020. Once policies and programs detailed in the following plan are fully implemented, Oceanside will likely exceed this goal.

This ZW Plan evaluates how to best help those living in, working in or visiting Oceanside to get to Zero Waste. The ZW Plan will inspire them to participate in the process after learning of the many social and entrepreneurial opportunities offered by such a dynamic, forward-thinking goal. The ZW Plan details Zero Waste policies and programs designed to reduce waste first, reuse and repair products as many times as possible, and then recycle or compost the rest.

"Oceanside has already achieved a remarkable 67% diversion rate through an impressive array of conservation and recycling programs."

This ZW Plan was developed by Zero Waste Associates[2] and guided by staff and the Oceanside Integrated Waste Management Commission. Over 100 stakeholders and interested citizens provided detailed input from four public meetings in November 2011. The public meetings elicited the best ideas from stakeholders on how to get to Zero Waste, and how residents and businesses could save money by discarding less.

Oceanside (City) has already achieved a remarkable 67% diversion rate through an impressive array of conservation and recycling programs. These include an aggressive Green Oceanside marketing campaign targeting strategic segments of the community through print and electronic media. Presentations conducted at local community events and educational materials are printed in both English and Spanish. A "Reduce Waste" campaign focuses on the commercial and industrial sectors. As part of that campaign, City staff attend Chamber of Commerce events and meetings, offers audits and provides technical assistance to help businesses reduce waste, recycle more and purchase in a more sustainable manner.

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[1] See Appendix A for copy of adopted resolution.

[2] Zero Waste Associates is a partnership of Richard Anthony Associates (www.richardanthonyassociates.com) and Gary Liss & Associates (www.garyliss.com).

Oceanside has established a recycling hotline, developed a harbor and beach recycling initiative, and implemented water conservation and storm water pollution prevention programs. The City also collaborates with Waste Management to provide education throughout the year to all sectors, promoting the importance of reducing waste, reusing and recycling. Through the Green Oceanside campaign presentations and lectures are conducted for local community groups and Oceanside schools. City staff offers year round environmental education programs in schools through its Green Week program and Environmental Youth Art Contest. Oceanside schools are provided containers, educational materials, and signage to continually expand their recycling and waste reduction programs.

"Each year, Oceanside discards 125,000 tons of materials with a market value of $8 million."

Each year, Oceanside discards 125,000 tons of materials with a market value of $8 million. One quarter of this value is from easily captured reusable products and packaging. Oceanside has strategically supported the location of two major recyclers in the city.

Green Waste Recycling: The City of Oceanside partnered with Agri Service, Inc. in 1995 to develop the El Corazon Compost Facility on a former silica mine located within the City. The City is only one of two communities in the county that supports composting by hosting a facility on municipal property.[3] Since its inception, the Agri Service El Corazon Compost Facility has processed over 1 million tons of yard trimmings and wood into high quality soil amendments, mulch and potting mixes, making Oceanside a leader in sustainable organic recycling. Agri Service works to keep materials local and promotes local recycling industries. As a local facility, it saves money for users and eliminates the transfer of approximately 50,000 tons of organics a year out of the city. Tipping fees at Agri Service for landscape debris are currently $20/ton less than the cost of transporting those materials further to the nearest transfer station in Carlsbad. This saves all the users of this facility the high cost of fuel and travel time.

As about half of the material generated is compostable, the largest opportunity to increase waste diversion in the long term will be through more composting. Agri Service, in partnership with the City, has provided numerous successful composting and sustainable gardening programs. These include giveaways of compost, worm castings, compost tea and red worms, and free composting workshops. Agri Service offers monthly "Home Grown" classes on sustainable food production and organic gardening. The City and Agri Service partnered in 2011 to implement a subsidized compost bin program for Oceanside residents to encourage at home composting. In addition to the myriad of benefits Agri Service provides to the community, they also have supplied free compost to multiple community gardens.

[3] The City of San Diego hosts a composting facility at the Miramar landfill, which it owns.

Construction Debris Recycling: Similarly, Moody's Recycling is a private construction and demolition debris contractor operating on land leased from the City of Oceanside at El Corazon. Moody's charges about one-third of the cost of competing facilities and is much closer than other sites, saving much wear and tear on City streets and much less pollution from hauling of these materials. Moody's products are also generally sold at 25% of the price of local competitors, providing high quality low cost support to the local construction industry. When Moody's will need to be replaced with facilities outside of Oceanside due to commercial developments at the El Corazon site, users may pay about $50/ton more, or a total of about $4 million per year.

Zero Waste programs will lead to the local reinvestment of these resources and the creation and protection of local jobs. This ZW Plan will also reduce marine, beach and waterway litter and help keep the Oceanside shoreline clean, safe and attractive. Residents and businesses understand how important clean beaches are to the economy of Oceanside. Zero Waste programs will ensure current business investment is maintained and help attract new capital to the community as well.

Zero Waste initiatives provide many tools to ensure that the heritage of family values, self-reliance of local business and a "can-do" culture is preserved. Zero Waste will also help residents and businesses save money, be more efficient, and reduce liabilities.

Businesses are, in fact, leading the way to Zero Waste. Those that have already embraced its principles have discovered the money it saves, the increased operational efficiency it brings, and the decrease in liabilities it offers. Past practices of landfilling discarded materials accrue significant long-term financial liabilities if landfills leak. Significant reduction in pollution and emissions will result as well.

"Large employers that are leading the way to Zero Waste have already diverted over 90% of their discards from landfills and incineration."

Large employers that are leading the way to Zero Waste have already diverted over 90% of their discards from landfills and incineration. They include:

- Vons/Safeway (corporate-wide)
- Albertsons (in the City of San Diego, and expanding county-wide, including Oceanside)
- Hewlett-Packard
- Point Loma Nazarene University

Other notable examples of those working towards Zero Waste are Walmart corporate-wide, and the U.S. military. The U.S. Navy is adopting Net Zero programs that will directly affect Marine Corps Base Camp Pendleton. Zero Waste initiatives are reaching our local schools. Palmquist Elementary School has adopted a Zero Waste program that is a model for the whole School District. The program, only months old, has already realized a significant savings in disposal costs that will greatly help the School District's finances. Four other schools are watching Palmquist and may be following their lead soon.

In addition, many businesses are leading the way locally to recycle more including: the Wyndham Hotel, Mira Costa College, Hill Street Café, Genentech, Coca-Cola Bottling, and Tri City

Hospital. Although the latter have not yet adopted Zero Waste as a goal, they are in a good position to do so.

Key Recommendations of Oceanside's Zero Waste Plan

For Oceanside to get to 75% by 2020, landfill diversion of another 15,000 tons per year will be required. Based on analyses for this ZW Plan, this 75% goal can be easily achieved through successful implementation of three programs:

- the new single-stream (single container) recycling program,
- expanded outreach and education for reuse, and
- the implementation of California's new mandatory commercial recycling law (AB341).[4]

Implementation of an expanded residential and commercial composting program could help move the City well beyond 75%. An expanded emphasis on food donations and home composting will dramatically reduce the costs of implementing compost programs in Oceanside. Implementation of reuse programs will increase the number of jobs created through this ZW Plan. Policies like Environmentally Preferable Purchasing and Extended Producer Responsibility will accomplish other goals of this ZW Plan, including creating more Green jobs locally and getting producers to takeback difficult to recycle products and packaging, which would reduce costs to the City.

- **Reduce First -** This ZW Plan focuses on reducing first and designing wastes out of the system. Reducing and eliminating wastes are the simplest tasks, save the most money, are easiest to implement, have lower start-up and management costs, and reduce emissions from decreased trucking and other "upstream" considerations. Reusing discarded materials and products for their highest and best use for their original form and function for as long as possible is the next priority. After these options are exhausted, the balance of materials should be recycled and composted.

  Critical elements include product stewardship and Extended Producer Responsibility (EPR), new policies and incentives, and technical assistance to businesses to comply with AB 341.[5]

- **Food Donations -** Once all source reduction methods are utilized, edible food should be donated to food banks and shelters. Both residences and businesses generate food suitable for donation, and there is an extensive network of shelters in the area that have a growing need for such donations.

  An Albertsons representative highlighted that, five years ago, 30% of all its discarded material was edible food. This led them to establish their "Fresh Rescue" Program, to donate more to local food banks and charities. As one in five Oceanside residents are food insecure (someone who isn't sure where their next meal will come from), donating as much edible food as possible is critical for these underserved people to survive.

[4] AB 341, adopted in 2011, requires all major businesses in California to recycle.
[5] In 2011, the State of California adopted AB 341, which requires all major businesses and multi-family dwellings to recycle in California, and establishes a 75% waste diversion statewide goal to be met by 2020.

- **Reusable Products -** The City should help form a reuse collaborative with reuse businesses and nonprofits throughout the region. This will prove to expand marketing opportunities for products collected through various reuse networks, and to foster development of better distribution systems for reusables as well. The City and WM should work with this collaborative to explore the possibility of developing a Reuse Warehouse.

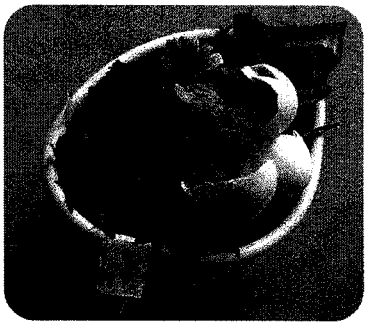
- **Recycling -** Oceanside has already implemented many of the most feasible recycling options, including its recent transition to single-stream recycling. This ZW Plan will make it easier to recycle and provide more incentives for waste reduction and recycling. Recommendations in this ZW Plan will increase efficiency, fairness, convenience and accessibility to programs as well.

  The City should continue to improve and expand waste reduction and recycling programs. Doing so throughout its jurisdiction will ensure compliance with state mandates and further the status Oceanside has established as a leader in North County in efficient and comprehensive resource management.

  The City should place recycling containers at all public facilities wherever trash containers are sited, to lead by example and support the local tourism industry. Locations should be phased in as soon as possible, starting with the highest use coastal areas and including all public parks, shopping malls, and transportation depots.

  Businesses that subscribe for 4 cubic yards of solid waste collection services and multi-family dwellings of 5 units or more must recycle as of July 1, 2012 to comply with AB 341.

- **Composting** – Residents, businesses and schools want more composting services. The City's existing home composting and subsidized bin programs were lauded for their success, and expansion was suggested. There was strong support for including food scraps in the green carts used by residents as soon as arrangements could be made for processing those materials.



  Representatives from both businesses and Oceanside schools stated that they would like to be able to compost their food scraps, whether it was onsite or through a collection program for centralized processing. Agri Service's composting facility is moving to another area on El Corazon and will be able to accept food material once relocated and permitted. Waste Management is investing heavily nationwide to develop more composting, including new facilities in Orange County and San Diego County.

- **Expanded Outreach -** The City should build upon its existing excellent outreach programs, expanding them to meet the challenge of Zero Waste. Oceanside should

partner with local businesses and nonprofits to assist with outreach and education required for implementing this ZW Plan.

- **Partnerships -** Waste Management, Agri Service and Moody's are key partners in meeting the City's goal of Zero Waste. They would all like to continue to partner with the City in achieving Zero Waste goals. Palmquist Elementary School's adoption of a Zero Waste Program highlights the opportunity to partner with all schools in Oceanside and the School District to pursue Zero Waste schools. North County Community Services is another potential partner, as they are looking for opportunities to have community gardens at their child development centers. Oceanside should also partner with Camp Pendleton to pursue Zero Waste with Net Zero programs.

  The City should also join state recycling coalitions, such as the Recycling BIN (Build Infrastructure Now) Coalition. The latter would lend support to the development of innovative new reuse, recycling and composting businesses in Oceanside and the region. This will foster re-investment of resources and cash back into the local economy, expand local markets for materials collected in Oceanside programs, and create good green-collar jobs. The City should join the California Product Stewardship Council to support more product stewardship programs on a statewide basis.

- **Plastic and Polystyrene -** The City should adopt an Extended Producer Responsibility (EPR) resolution to guide its product stewardship and EPR policies and programs. Then the City should adopt an ordinance to reduce the use of single-use shopping bags. Over 30% of roadside litter is plastic[6] and plastic bags are among the top 3 items found littered on beaches and waterways.[7] Plastic bags in cities frequently block stormwater flows in grates and drains. Plastic also breaks down into smaller and smaller pieces, which can end up in the food chain.[8] Marine life mistakes plastic debris in the ocean for food, which can harm them.[9] All large grocery stores are supportive of consistent local regulations regarding single-use shopping bags. Until there is a state law, they would like to avoid having to comply with different policies and procedures for each jurisdiction. Nineteen communities have adopted ordinances already. Ordinances are also formally and informally under discussion in over 55 communities around the state, including nearby in: Dana Point, Encinitas, Huntington Beach, Laguna Beach, and San Clemente. The use of expanded polystyrene food takeout containers should also be phased out for many of the same reasons.

- **Purchasing Policy -** The City should update its purchasing ordinance, policies and procedures to encourage use of recycled-content and reusable products, and other environmentally preferable products and services as well.

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[6] This reference and the following three references are all taken from the Los Angeles Reusable Bag Fact Sheet References dated February 28, 2012. The first reference is from the California Department of Transportation District 7. "Litter Management Pilot Study." June 26, 2000.http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-00-013.pdf, Section 6.3.3, page 6-6.

[7] Ocean Conservancy. http://www.oceanconservancy.org/our-work/marine-debris/program_marinedebris_iccreport.html

[8] European Commission Director General for the Environment ec.europa.eu/environment/waste/studies/pdf/plastics.pdf

[9] Possatto et al., "Plastic debris ingestion by marine catfish: An unexpected fisheries impact," 2011.http://www.caseinlet.org/uploads/Plastic_debris_ingestion_by_marine_catfish_An_unexpected_fisheries_impact_1_.pdf

Conclusion - No Cost Enhancement for the City

With the adoption of this ZW Plan, new policies for source separation, producer responsibility and organics will encourage local partners and entrepreneurs to invest in programs required to waste less and recycle more. The City's primary role is to adopt policies and incentives, and to educate, promote, enforce and reinforce this new direction.

Waste Management, Agri Service and Moody's are key partners in meeting the City's goal of Zero Waste. They have unequivocally stated their support for the City in achieving its Zero Waste goal. The key to investment from its partners will be comprehensive implementation of existing contracts and working collaboratively on innovations that may be needed.

New partners leading the way to Zero Waste will be Zero Waste Businesses, Zero Waste schools and City community centers including beaches and the harbor. Medium and large businesses and multi-family properties will also work closely with the City to comply with the new State mandate to recycle under AB341. Local retailers will assist by taking back difficult to recycle products and packaging from their customers and create new customer loyalties. The City will also work with reuse businesses and nonprofits to promote them and help them expand and provide new reuse services.

Residents and businesses that follow and implement the recommended programs will save money. Through adoption of "Cradle to Cradle" take back programs, producers will cover the costs needed to recover any products or packaging that are currently difficult to recycle. These Zero Waste programs will also reduce transportation and disposal costs for the City, and for local businesses and multi-family units. The City will also reduce its greenhouse gases by 191,905 MTCO2e per year, the equivalent of removing 37,628 cars from Oceanside roadways each day.[10]

Any additional capital investments required could be made by the City's partners and amortized over the life left in existing contracts. The City can use existing resources derived from waste and recycling programs and waste franchise fees and grants to assist with covering City costs to implement this ZW Plan. In the near future, savings will exceed any costs and less waste will go into landfills and the City's waterways and beaches.

Through adoption of this Plan, the City will ensure that no resident, business, institution or school is left behind on the road to Zero Waste. The recommended policies and programs detailed in this document are sure to have a positive impact on Oceanside's local economy and residents' overall quality of life, while not requiring any additional City fees.

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[10] Based on EPA Waste Reduction Model (WARM) at:
http://epa.gov/climatechange/wycd/waste/calculators/Warm_home.html

2. Zero Waste Process and Data Analyses

On August 25, 2010, the City of Oceanside (City) City Council unanimously passed a resolution to request staff to develop a Zero Waste Strategic Resource Management Plan (ZW Plan). The Council Resolution calls for achieving 75% waste diversion by 2020. This ZW Plan has been developed to meet that Council adopted resolution and goal. Once fully implemented, the City should be able to achieve diversion higher than 75%, and ultimately meet the international standard of 90% to become a Zero Waste Community.

In 2011, the State of California adopted AB 341, which requires all major businesses to recycle in California, and establishes a 75% waste diversion statewide goal to be met by 2020. As part of this Plan, and to meet these state mandates Oceanside will be required to review and update the local mandatory commercial recycling ordinance that its businesses will have to follow.

"Oceanside has already implemented or is in the process of implementing many of the most feasible recycling options."

Oceanside has already implemented or is in the process of implementing many of the most feasible recycling options. This ZW Plan evaluates how to best help those living in, working in or visiting Oceanside to get to Zero Waste.

Scope of Work

Oceanside selected Zero Waste Associates[11] to work with City staff, the Integrated Waste Management Commission and the public to develop the ZW Plan. The City requested that the following goals guide the scope of work:

- Increase waste reduction and resource conservation
- Recycle, compost or divert 75% of Oceanside municipal solid waste (MSW) by 2020
- Increase efficiency, fairness, convenience and accessibility to reduce, reuse, repair, recycle and compost in the City of Oceanside
- Expand local markets and increase use of recycled content products
- Encourage producer responsibility and sustainable resource management practices
- Evaluate and expand zero waste services in compliance with state laws
- Improve sustainable resource management at all City operations
- Partner and support the Green Oceanside campaign for clean and sustainable neighborhoods
- Develop a Plan that can be implemented and referenced easily by all City staff

Other solid waste and recycling priorities adopted by the City are:

- Develop a Zero Waste Strategic Plan to help the City achieve its goal of 75% by the year 2020

[11] Zero Waste Associates is a partnership of Richard Anthony Associates (www.richardanthonyassociates.com) and Gary Liss & Associates (www.garyliss.com)

- Continue to improve and expand waste reduction and recycling programs throughout the City in order to meet and exceed state mandates as well as the needs of the community and the environment
- Seek grant resources to support expanding project goals and objectives
- Develop environmentally sustainable policies and strategies that nurture and enhance the goal of the City to be a leader in North County in regards to efficient and effective resource management

Organization of Zero Waste Plan

This ZW Plan first highlights what Zero Waste is and the benefits of a Zero Waste systems approach. Then the current system is summarized and analyzed, to identify opportunities for Zero Waste. The ZW Plan then recommends specific policies, programs and facilities that should be pursued to help the City achieve its goal of Zero Waste, including Changing the Culture, Reduce and Reuse, Recycling, Composting and proper handling of Special Discards (materials that are generally regulated and may not be disposed of in landfills or into sewers). The ZW Plan summarizes these recommendations in the Conclusion and details an implementation plan for the next year, years 2-5, and years 6-10. Finally, detailed policies and case studies are highlighted in a separate document with 18 Appendices.

What is Zero Waste?

Zero Waste focuses on reducing and designing wastes out of the system, reusing discarded materials and products for their highest and best use for their original form and function for as long as possible, then recycling and composting the rest.

ZERO WASTE
INTERNATIONAL ALLIANCE
working towards a world without waste

The Zero Waste International Alliance (ZWIA) defines Zero Waste as follows:[12]

> "Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where **all discarded materials are designed to become resources for others to use**. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and **not burn or bury them**. Implementing Zero Waste will **eliminate all discharges to land, water or air** that are a threat to planetary, human, animal or plant health."

[12] Source: http://zwia.org/joomla/index.php?option=com_content&view=article&id=9&Itemid=6

This is the only peer-reviewed definition of Zero Waste that is internationally accepted by the worldwide Zero Waste, recycling and environmental movements. ZWIA defines the measure of success in meeting that goal to be diverting 90 percent of the waste generated by all sources (e.g., residential, business, schools, institutions and communities) from landfills and incinerators.

Zero Waste Goal

Most Zero Waste communities in California have selected an interim target of between 70-75% diversion within about five years, and 90% diversion by 2020-2025.

"Once fully implemented, the City should be able to achieve diversion higher than 75%, and ultimately meet the international standard of 90% to become a highly successful Zero Waste Community."

Oceanside most recently posted a diversion rate of 59% in 2006, before reporting changed to a per capita measurement system. Using a formula provided by CalRecycle, the per capita rate for Oceanside calculates to a 67% current diversion rate in 2010.[13] The Oceanside City Council's adoption of a goal of achieving 75% diversion by 2020 is a reasonable target given it is the first community in San Diego County to develop such a ZW Plan. Oceanside will be pioneering many policies and programs to achieve that goal. This goal year is also strategically important, as it is 3 years before the end of the current Waste Management contract. Three years is a good amount of lead time for the City to assess how it wants to proceed regarding extending the contract again, or soliciting other firms.

Once the ZW Plan is fully implemented, the City should be able to achieve higher diversion than 75%, and ultimately meet the international standard of 90% diversion to be a highly successful Zero Waste Community.

"Recommendations to accomplish Oceanside's goal are to focus on outreach and education related to reduce and reuse policies and programs and successful implementation of California's mandatory commercial recycling program."

For Oceanside, to get from the current 67% diversion, to 75% of current disposal tonnage of 125,000 tons per year by 2020, diversion of another 15,000 tons per year from landfills and incineration will be required.[14] Recommendations to accomplish Oceanside's goal are to focus on outreach and education related to reduce and reuse policies and programs and successful implementation of California's mandatory commercial recycling program. Some 4,000 tons of diversion per year could be achieved through reduce and reuse outreach and education programs

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[13] The formula with latest numbers filled in is [1 - ((4.1 * 0.5) / 6.3) = 0.67] or 67% waste diversion.
[14] Calculated by dividing 125,000 tons by 67 to see how much each diversion point is equal to (1,866 tons/year), then multiplied by 8 percentage points to get from 67% to 75% (14,925).

alone[15] and the mandatory commercial recycling program could capture about 17,000 tons annually[16]. If these programs are fully implemented, Oceanside will easily achieve its 75% diversion goal. Implementation of an expanded residential and commercial composting program could capture another 13,000 tons per year, which could help move the City well beyond 75%.[17] Implementation of reuse programs will also increase the number of jobs created through Zero Waste. An expanded emphasis on food donations and home composting will dramatically reduce the costs of implementing compost programs in Oceanside.

To provide a solid baseline for measuring progress towards its Zero Waste goal, Oceanside should conduct a waste generation/characterization study immediately following adoption of the ZW Plan. This information would also help further identify what is and what is not getting recycled. Waste Management has agreed to conduct such a study as part of the extension of their agreement with the City.

Benefits of a Zero Waste Approach and Success Stories

Businesses are leading the way to Zero Waste, particularly in the current economic climate. Those that already embrace Zero Waste have discovered the money it saves, the increased operational efficiency it brings, and the decrease in liabilities it offers, as well as a significant reduction of their carbon footprint and greenhouse gases.

"Businesses are finding that their customers really appreciate it when they take the extra steps to be Green, and oftentimes attract return customers because of that fact."

Residents and businesses also understand the importance of clean beaches to Oceanside. The community grew dramatically due to the attractiveness of its beaches and ocean amenities. Zero Waste initiatives provide many tools to ensure that heritage is preserved, for the benefit of residents, businesses, visitors and investors.

There are several examples of Zero Waste Businesses that have already diverted over 90% of their wastes from landfills and incineration in San Diego County, including:

- Albertsons (in the City of San Diego, and expanding county-wide, including Oceanside)
- Hewlett-Packard
- Point Loma Nazarene University

Other notable examples of those working towards Zero Waste are:

- Walmart corporate-wide
- Palmquist Elementary School
- The U.S. military

The U.S. military is adopting Net Zero programs that will directly affect Camp Pendleton.

[15] This will be primarily from businesses in response to the State mandatory commercial recycling program, and assumes that about 5% of 86,250 tons per year of commercial solid waste are reduced and reused.
[16] 20% of 86,250 tons per year of commercial solid waste recycled or composted.
[17] See calculation in Composting section on page __.

Palmquist Elementary School has adopted a Zero Waste program that is a model for the whole School District. The program, only months old, has already realized a significant savings in disposal costs that will greatly help the School District's finances. Four other schools are watching Palmquist and may be following their lead soon.

In addition many businesses are leading the way locally to recycle more including:

- Wyndham Hotel
- Mira Costa College
- Hill Street Café, Coca-Cola Bottling
- Tri City Hospital
- Genentech[18]

Although the latter have not yet adopted Zero Waste goals, they are in a good position to do so.

WM also is required to work with the City to set up a Green Business program under its new contract. The Green Business program will help companies identify what practices they already follow that would enable them to be recognized as an official Green Business, and suggest many other ways for them to be more Green, clean and sustainable as well.

Businesses are finding that their customers really appreciate it when they take the extra steps to be Green, and oftentimes attract return customers because of that fact. Also, all businesses that have adopted Zero Waste as a goal have saved money, reduced their liability, increased their efficiency and reduced their greenhouse gases. They save the most money by reducing wasting, next most by setting up reuse systems like returnable shipping containers, and they also save with recycling and composting, if the trash fees provide incentives for waste reduction.

"All businesses that have adopted Zero Waste as a goal have saved money, reduced their liability, increased their efficiency and reduced their greenhouse gases."

Examples of Zero Waste Business Cost Savings

Toyota has 10 "Zero Waste" Plants in the U.S. that achieved 95% reduction of waste to landfill since 1999. Toyota also reported one headquarters building and 3 Distribution Centers are "Zero Waste to Landfill", and eight Distribution Centers achieved a greater than 90% Recycling Rate. Several years ago Toyota reported that they **reduced their waste management costs by $1.3 million** and that **returnable shipping modules saved them $5.3 million in costs**.

Hewlett Packard in Roseville, CA had 9,000 Employees and achieved a 94% Waste Diversion rate in the 1990s. They reported that they **reduced their waste management costs by $870,564 per year**.

Small companies like Mad River Brewing Company in Blue Lake, CA also have reported savings that are significant for them. They had 34 Employees in 15,000 sq. ft. and achieved over 98% Waste Diversion, generating less than two 90-gallon trash cans per week. They reported that they **reduced their waste management costs by $35,654 per year**.

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[18] Genentech conducted a waste audit in mid-September 2011 to identify opportunities to pursue Zero Waste.

A ZERI[19] Brewery Project in Namibia (southern Africa) reported that they produce:

- Seven times more food, fuel and fertilizer,
- Four times as many jobs and
- Twelve more products

...than a conventional beer producer. They used 40 different bio-chemical processes to reuse everything, including heat, water, wastes, and carbon dioxide.

Discards Data

Building upon existing infrastructure is a key part of the Zero Waste process, and involves utilizing existing facilities for development of more reuse, recycling and composting activities. This begins with an analysis of existing facilities and services in Oceanside. This includes identifying the amount of materials wasted, reused, recycled and composted annually. It also looks at where wasting occurs, such as in the production of products and packages, getting them to local markets, local consumption, and end-of-life disposal.

Table 1 - Largest Business Generators of Discarded Materials in 2000.[20]

Business Types	% of Materials	Tons of Materials/Year
Retail Trade - Restaurants	18.2%	11,079
Services-Medical / Health	11.3%	6,893
Retail Trade - Other	9.8%	5,968
Construction	8.8%	5,352

Although these numbers would be different if evaluated today, they provide insight as to what sectors were discarding the greatest amounts of materials before the downturn in the economy (and will likely do so again in the future). The construction sector has been affected the most by the economy, as there is not nearly as much construction and demolition going on.

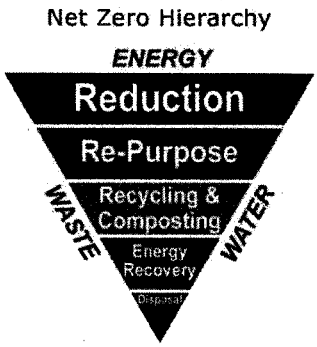
Of the total 58,082 housing units in the City, about two-thirds of residents live in single-family homes (37,078 units) and one-third live in complexes (17,796).[21] There are also 3,208 mobile housing units in Oceanside. Residential was 31% of the total amount of materials discarded in 2009 (38,750 tons per year). Industrial,

[19] ZERI = Zero Emissions Research & Initiatives. See www.zeri.org and www.blueeconomy.de
[20] Source: Top 4 Business Types with the Most Disposal based on 2000 Statewide Estimates at: http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID=346&JUR=Oceanside
[21] Source: http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID=346&JUR=Oceanside

commercial and institutional was 69%[22] of the total amount of materials discarded in 2009 (86,250 tons per year).

The last diversion rate Oceanside reported to the state was 59% in 2006. With the adoption of SB 1016[23] in 2008, the California Department of Resources Recycling and Recovery (CalRecycle) now measures waste diversion performance by calculating per capita disposal rates and evaluating program implementation efforts. CalRecycle compares the reported amount of disposal in tons to the population to calculate this per capita disposal rate, which communities target to be below. Oceanside's target rate is 6.3 pounds per person per day, and the industry employment target is 29.4 pounds per person per day. These figures were calculated in 2007 based on data for Oceanside for the years 2003 through 2006.[24]

The statewide per capita disposal rate for 2010 was 4.5 pounds per person per day. For Oceanside, that rate is now 4.1 pounds per person per day and the employment rate is 21 pounds per person per day, so the City is well within the requirements of AB 939 according to SB1016 measurements.[25] Using a formula provided by CalRecycle, these per capita rates for Oceanside calculate to a 67% waste diversion rate in 2010.[26]



Although Camp Pendleton is not included in the City's population or tonnage reporting figures, there are many ways that Oceanside and Pendleton could work together to reinforce Zero Waste policies and programs. The US military has been working to implement a variety of federal executive orders to expand their recycling programs, including a recent effort for Net Zero. The first Marine Corps Net Zero Energy base was Air Station Miramar. The goal of Net Zero Energy is for a military installation to produce as much energy (focusing on renewable energy) on or near the installation, as it consumes in its buildings and facilities.[27] The Army has already adopted a goal of Net Zero for energy, water, and waste. Their Net Zero programs have a hierarchy that starts with reduction, and then progresses through repurposing, recycling, energy recovery, and disposal being the last.[28] Military personnel and families also live in Oceanside off base, further supporting the need to work collaboratively to encourage recycling and waste reduction.

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[22] This percentage includes multi-family homes
[23] SB 1016, Wiggins, Chapter 343, Statutes of 2008
[24] Email from Stephanie Ewalt, San Diego County, December 1, 2011.
[25] The 50 percent waste diversion goal of AB939 is now calculated using the average of 2003-2006 per capita generation rates for each jurisdiction. CalRecycle then divides this generation rate average in half to determine the 50 percent equivalent per capita disposal target. The 50 percent equivalent per capita disposal target is the amount of disposal a jurisdiction would have had during the base period if it had been exactly at a 50 percent diversion rate. Source: http://www.calrecycle.ca.gov/LGCentral/GoalMeasure/FAQ.htm#explain
[26] The formula with latest numbers filled in is [1 - ((4.1 * 0.5) / 6.3) = 0.67] or 67% waste diversion.
[27] http://www.govenergy.com/2009/pdfs/presentations/Security-Session07/EnergySecurity-Session07-Westby_Bob.pdf
[28] http://army-energy.hqda.pentagon.mil/netzero/

Commodities Analysis

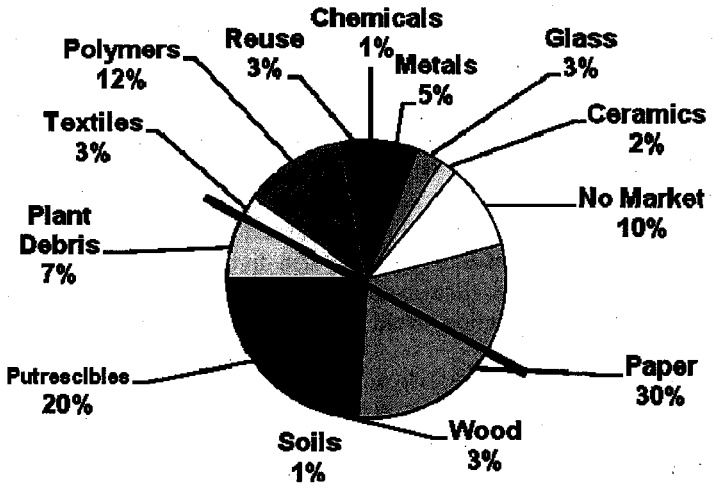
In a Zero Waste systems approach, one of the first steps is a Commodities Analysis. This looks at what materials and products are being discarded and what the values of those materials are.

Applying the CalRecycle Statewide Waste Characterization Study and regional data to the City of Oceanside's 125,000 tons of discards disposed of in 2010, percentages and annual tonnages have been estimated for each of 12 market categories below in Table 2.

Table 2 - Commodity by Percentage of Total and Tons

Market	%	Tons
1. Reuse	3	3750
2. Paper	30	37,500
3. Plant Debris	7	8750
4. Putrescibles	20	25,000
5. Wood	3	3750
6. Ceramics	2	2500
7. Soils	1	1,250
8. Metals	5	6250
9. Glass	3	3750
10. Polymers	12	15000
11. Textiles	3	3750
12. Chemicals	1	1250
No market: e.g. diapers, treated wood, mistakes, composites	10	12,500
Total	**100**	**125,000**

This analysis is also shown as a pie chart below. Organics (all the material below the black line) comprise half of the material disposed of in the landfill and could be composted and/or digested.



The following table uses 2010 numbers to show by commodity, the amount discarded, value per ton if recovered, and the total value of material currently disposed of in the landfill. The estimated value of the materials disposed of in the landfill from Oceanside in 2010 is over $8 million. Of this amount, reusable items are estimated to be worth more than $2 million. This is the value of the material baled or ready for sale, and although it does not include the processing costs, it also does not include avoided landfill costs. A 50% recovery of reusables alone should be worth $1 million to the City in potential new revenue annually.

Table 3 - Estimated Market Value of Oceanside's Discards[29]

Market	%	Tons	$/ton	Value $
1. Reuse	3	3750	550	2,062,500
2. Paper	30	37,500	50	1,875,000
3. Plant Debris	7	8750	7	61,250
4. Putrescibles	20	25,000	7	1,875,000
5. Wood	3	3750	8	30,000
6. Ceramics	2	2500	4	10,000
7. Soils	1	1,250	7	8,750
8. Metals	5	6250	50	312,500
9. Glass	3	3750	10	37,500
10. Polymers	12	15000	100	1,500,000
11. Textiles	3	3750	100	375,000
12. Chemicals	1	1250	15	18,750
No market (e.g. diapers, treated wood)	10	12,500	0	---------
Total	**100**	**125,000**		**$8,166,250**

Service Opportunities Analysis

In a Zero Waste systems approach, another one of the first steps is an inventory of reuse, repair, recycling and composting facilities for materials currently discarded. The analysis identifies suitable locations for all materials generated. The analysis also evaluates whether there are any differences in services available by sources of materials, from residents, businesses, construction and demolition activities or self-hauled. The analysis also identifies both public and private services that are available.

This inventory does not recognize landfills or incinerators as suitable facilities, and identifies voids or gaps in materials markets and services. These are considered to be "service opportunities" for someone to provide that service in the future. The inventory identifies specific programs and facilities inside Oceanside or that serve Oceanside that can repair, reuse, recycle or compost discarded materials. Once these service opportunities are identified, the ZW Plan particularly makes sure that there are policies, programs and/or facilities that address the largest

[29] Sources: Waste composition data from CalRecycle's statewide waste characterization studies and current market value data from trade magazines and www.grrn.com.

amounts of materials, the most valuable materials and the most toxic materials and products being discarded.

Discards are identified by standard classifications (typical discard sort categories) and sorted into twelve market categories. For each classification, market options are identified (landfilling or burning are *not* considered acceptable options). Products or packages that have unacceptable disposal options and/or require new services are identified through this process as well.

Issues of access, opportunity, availability and knowledge come next. In many cases (disposable diapers, for example), the inventory shows that there is no reuse, recycling or composting option. These items can be addressed as producer responsibility issues, and may include a decision being made about how a particular product could be redesigned or a new recovery system implemented.

The following table shows the result of the market inventory.

Table 4 - Product and Materials Market Inventory

Material Category	**Programs/Facilities/Options** *Unless another City is noted, all addresses are in Oceanside.*
1. Reusables Appliances (e-waste) White goods (e.g., refrigerators, ovens, washers, dryers) Durable plastic products Usable Textiles Mattresses Furniture Books Building materials Other reusables and repairables	▪ WM Recycling Facility, 2880 Industry Street. WM takes e-waste free, at curb and at buyback. WM picks up white goods through bulky service ▪ AD Computer Sales ▪ Disabled American Veterans (DAV), 1624 S. Coast Highway ▪ Brother Benno's Thrift Shop, 3965 Mission Ave. ▪ Ecology Auto Parts, 2315 Carpenter Rd. ▪ Gallant's Truck Salvage, 1020 Airport Rd. ▪ Goodwill, 3841 Plaza Drive #902 ▪ I Sold It, 4093 Oceanside Blvd. #H ▪ I'll Buy That, 1719 S. Coast Highway ▪ Leo Hamel Est Jewelry Buyers, 2741 Vista Way ▪ New 2 You Thrift Store, 1830 Oceanside Blvd. Ste. B ▪ Oceanside Swap Meet, 3480 Mission Ave. ▪ Potpourri Thrift & Resale Shop, 1024 S, Coast Highway ▪ Sparkle Plenty Resale Boutique, 1816 Oceanside Blvd. ▪ Spirit Of Sharing, 2225 Mission Ave. ▪ Treasures On The Coast, 1836 S Coast Highway ▪ Tri-City Hospital Foundation, 4002 Vista Way ▪ Women's Resource Center Thrift Store, 3385 Mission Ave.
2. Paper Cardboard White ledger Newsprint Magazines/catalogs Other office paper	▪ WM Recycling Facility, 2880 Industry Street ▪ Ben Recycling, 395 Via Del Monte ▪ Quality Recycling, 149 Nettleton Rd., Vista 92083 ▪ EDCO Recycling, 224 South Las Posas Rd., San Marcos 92078

Paperboard Other/composite paper	
3. Plant Debris Leaves, grass, prunings, branches, brush, stumps and yard trimmings Residential and commercial landscaping debris	▪ El Corazon Compost Facility, 3300 1/2 Oceanside Blvd. ▪ Evergreen Nursery 3231 Oceanside Blvd.
4. Putrescibles Food scraps Fish and meat scraps Sewage sludge	▪ Home or onsite composting ▪ Food banks ▪ Renderers
5. Wood Untreated wood	▪ ASI Compost Facility 3300 1/2 Oceanside Blvd. ▪ Evergreen Nursery, 3231 Oceanside Blvd.
6. Ceramics Concrete Asphalt paving Tile Stepping stones	▪ Moody's, 3210 Oceanside Blvd. ▪ EDCO CDI Recycling Facility, 224 S. Las Posas Rd., San Marcos, 92078 ▪ Romero General Construction Corporation, 8354 Nelson Way, Escondido 92026
7. Soils Gypsum board Fines	▪ Moody's, 210 Oceanside Blvd. ▪ EDCO CDI Recycling Facility 224 S. Las Posas Road, San Marcos 92069
8. Metals Auto bodies Aluminum cans Steel cans Other Ferrous metals Other Non-ferrous	▪ WM Recycling Facility, 2880 Industry Street ▪ WM Recycling, 5960 El Camino Real, Carlsbad 92008 ▪ Ben Recycling, 395 Via Del Monte ▪ Ecology Auto Parts, 1030 Airport Rd. ▪ Quality Recycling, 149 Nettleton Rd., Vista 92083 ▪ Lee's Iron & Metal, 1315 Lee Dr., Vista 92083 ▪ EDCO, 224 S. Las Posas Rd., San Marcos, 92078 ▪ Escondido Recycling Yard, 1350 W. Mission Rd., Escondido 92029 ▪ Simba International, 2654 Vista Pacific Dr. ▪ California Metals and Electronics 297 South Marshall Ave., El Cajon 92020
9. Glass Clear glass Green glass Mixed glass Brown glass	▪ WM Recycling Facility, 2880 Industry Street ▪ Ben Recycling, 395 Via Del Monte ▪ Lee's Iron & Metal, 1315 Lee Drive, Vista 92083
10. Polymers #1 PET #2 HDPE #3 PVC #4 LDPE #5 PP #6 PS #7 other labeled plastic Other plastics	▪ WM Recycling Facility, 2880 Industry Street ▪ Ben Recycling, 395 Via Del Monte ▪ Lee's Iron & Metal, 1315 Lee Drive, Vista 92083 ▪ IMS Recycling, 2697 Main St., San Diego 92113 ▪ Recon Recycling, 2393 Newton Ave, San Diego 92113 ▪ Amermex Recycling Inc., 418 South Meadowbrook Dr., San Diego 92114 ▪ Allan Company Recycling, 8514 Mast Blvd., Santee 92071

Asphalt Roofing Tires	▪ Quattra Via Aveda (bottle cap recycling), 1905 Calle Barcelona, Carlsbad 92009
11. Textiles Poly fibers Cotton and wool	▪ DFS Flooring, 8828 Complex Drive, San Diego 92123 ▪ A+ Carpet Recycling, 8585 Production Ave., San Diego 92121 ▪ Carpet Pad Conversion USA, Inc., 2501 Commercial St. #A, San Diego 92113 ▪ Planet Recycling, 690 Anita St., Chula Vista 91911 ▪ USAgain, 5206 Eastgate Mall, Suite 2, San Diego, CA 92121
12. Chemicals Used motor oil Household Hazardous Wastes Disposable Diapers Medical waste Batteries Sharps Cigarette Butts[30]	▪ WM Recycling Facility, 2880 Industry Street (except diapers) ▪ Sharps can go to WM or be deposited into kiosks at both senior centers (El Corazon and Country Club) ▪ Many auto parts stores take used oil & filters

A review of the service opportunities show that there are a few areas where new policies and redesigned storage, collection and processing systems would allow the capture of more materials. The following table shows some of those challenges:

Table 5 - Challenges Associated with More Difficult to Handle Discards

Material	Challenge
Food scraps (including fish and meat)	Processing capacity is needed for Southern California
Used building materials	Need 12-category Resource Recovery Park
Treated wood	No markets, these products require redesigning
Window and other glass	Need markets for window and other glass
#3-#7 and other plastic (i.e. plastic bags, Styrofoam)	Need better local markets for some; policies or ordinances to get producers to redesign or City ban
Diapers	No markets, these products require redesigning and take-back systems
Textiles	Need local textile broker

Reusables and Organics - The most opportunity exists for reusables and organics recovery systems. There is also a significant amount of work that needs to be done in the area of encouraging producers and retailers to take responsibility for products and packaging that are not safe for landfilling or disposing down the drain.

[30] Earth Resource Foundation notes that cigarette butts are not biodegradable; they harm our ecosystems, and contain over 165 chemicals See: http://www.tobaccofacts.org/suckedin for more info.

Packaging - This service opportunity analysis shows that many packaging items (film plastics and polystyrene) have no markets in the region. This leaves landfill and the environment for disposal of these materials and a large amount of these materials are ending up in storm drains and eventually going into waterways. Clean Water Act policies prohibit this and are now being enforced. Producers should develop markets for these materials or the products could be banned or gradually eliminated from use in Oceanside based on their health hazard. In addition, as a beach community it is important to realize that over 30% of roadside litter is plastic[31] and plastic bags are among the top 3 items found littered on beaches and waterways.[32] Plastic bags in cities frequently block stormwater flows in grates and drains. Plastic also breaks down into smaller and smaller pieces, which can end up in the food chain.[33] Marine life mistakes plastic debris in the ocean for food, which can harm them.[34]

Waste Reduction Model (WARM)

Beginning with landfill tons presented above in Table 3, the following table represents the amount of greenhouse gases (GHG) that are either emitted or eliminated by landfilling and/or recycling. The results are derived from the U.S. Environmental Protection Agency's Waste Reduction Model (WARM), which is the standard in the industry for evaluating such impacts.[35]

According to its website, EPA created WARM to help solid waste planners and organizations track and voluntarily report GHG emissions reductions from several different waste management practices. WARM calculates and totals GHG emissions of baseline and alternative waste management practices - source reduction, recycling, combustion, composting, and landfilling. The model calculates emissions in metric tons of carbon equivalent (MTCE), metric tons of carbon dioxide equivalent (MTC02E), and energy units (million BTU) across a wide range of material types commonly found in municipal solid waste. WARM now recognizes 40 material types, and their emission factors are available for viewing in units of MTC02E and MTCE.

The WARM Model shows that the City will reduce its greenhouse gases by 191,905 MTCO2e per year, the equivalent of removing 37,628 cars from Oceanside roadways each day.

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[31] This reference and the following three references are all taken from the Los Angeles Reusable Bag Fact Sheet References dated February 28, 2012. The first reference is from the California Department of Transportation District 7. "Litter Management Pilot Study." June 26, 2000.http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-00-013.pdf, Section 6.3.3, page 6-6.

[32] Ocean Conservancy. http://www.oceanconservancy.org/our-work/marine-debris/program_marinedebris_iccreport.html

[33] European Commission Director General for the Environment ec.europa.eu/environment/waste/studies/pdf/plastics.pdf

[34] Possatto et al., "Plastic debris ingestion by marine catfish: An unexpected fisheries impact," 2011.http://www.caseinlet.org/uploads/Plastic_debris_ingestion_by_marine_catfish_An_unexpected_fisheries_impact_1_.pdf

[35] WARM Model online: http://epa.gov/climatechange/wycd/waste/calculators/Warm_home.html

Table 6 - EPA WARM Model Summary: Recycling vs. Landfilling GHG Emissions Analysis for Oceanside - Summary Report

A negative value indicates an emission reduction. A positive value indicates an emission increase.

GHG Emissions from Baseline Waste Management Scenario of landfilling in MTCO2E:	2,793
GHG Emissions from Alternative Waste Management Scenario of implementing ZW Plan in MTCO2E:	-189,112
Total Change in GHG Emissions: (MTCO2E):	**-191,905**

Material	Tons Landfilled	Total MTCO2E	Tons Recycled	Total MTCO2E	Change (Alt - Base) MTCO2E
Glass	3,750	146	3,750	-1,046	**-1,191**
Mixed Paper (general)	37,500	1,725	37,500	-131,633	**-133,358**
Mixed Metals	6,250	243	6,250	-33,781	**-34,024**
Mixed Plastics	15,000	582	15,000	-22,447	**-23,029**
Asphalt Concrete	2,500	97	2,500	-206	**-303**

Results of Stakeholders and Public Input

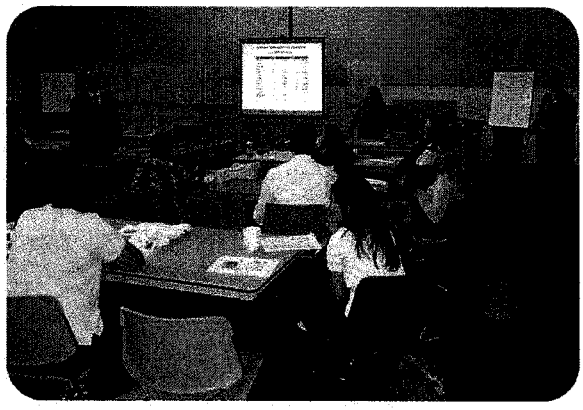
The initial steps of the ZW Plan process involved gathering information about Oceanside and identifying and interviewing stakeholders. Business and organizations in Oceanside that provide reuse, recycling, organic and/or special discards services and education were identified, interviewed and invited to public meetings at City Hall on November 1 and 17, 2011. Over 100 stakeholders and interested citizens attended the four meetings (two meetings were held on each of these days).

The public meetings were designed to elicit the best ideas to help residents and businesses save money by discarding less. Each of the meetings included some background on Zero Waste, and then focused on various aspects of resource management, including:

- Reducing - How to reduce discards by eliminating poor product design and marine debris.
- Reuse - Increasing support for local thrift stores and antique and repair shops.
- Recycling - Understanding new state mandates requiring all apartments and major businesses to recycle.
- Composting - Turning yard trimmings and food scraps back into soil.

Key messages conveyed by the public through these public meetings included:

- The City needs programs to better emphasize the importance of reducing and eliminating inefficient, polluting and wasteful behavior and practices. Reducing the use of plastic bags and polystyrene containers were top priorities from the public.



  One major grocery chain in attendance (Albertsons) encouraged the City to consider adopting the Los Angeles County model for plastic bag reduction so that there is a consistent approach being taken by local governments throughout the state.

- There was strong support for more City programs to help promote reuse opportunities, particularly for food donations. Some reuse nonprofits would like to develop a reuse warehouse to help sort and store products collected by WM and through the reuse network in the area.

- Helping businesses to decrease inefficient use of resources and wastefulness was another priority. The City needs to determine how to best implement AB 341, which requires every major business to recycle and for California to achieve a 75% recycling goal by 2020. Expanding the City's capacity to provide waste audits for businesses was considered important.

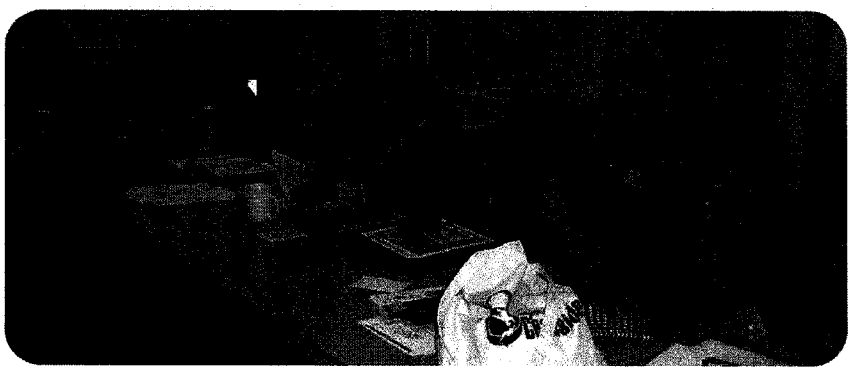
- Residents were excited about the new cart system slated for implementation in January 2012. They indicated it would simplify recycling and make it easier to participate in the program. The ability of rolling everything out to the curb was also considered a plus.

- Outreach, education, use of social media, community organizing, and new policies and incentives will be key to increasing participation rates for residents, businesses and visitors. Green businesses representatives expressed that they'd like Oceanside to adopt policies that level the playing field. Currently they are paying more than their competitors for some Green initiatives. If those initiatives were required for all, then they would be better able to compete in the marketplace.

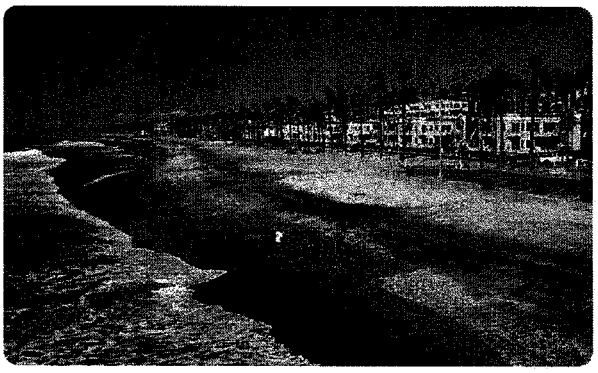
"Residents were excited about the new cart system.... They indicated it would simplify recycling and make it easier to participate in the program."

- Residents, businesses and schools all expressed the desire to be able to compost more. The City's existing home composting and subsidized bin programs were noted for their success and expansion was suggested.

- There was also strong support for including food scraps in the green carts used by residents as soon as arrangements could be made for processing those materials. Businesses and Oceanside Unified Schools also expressed strong interest. Representatives stated they would like to be able to compost their food scraps, either on-site or through a targeted collection program. Agri Service highlighted it is relocating its composting facility on El Corazon and will be permitted to accept food materials after relocation.



3. Background



With a population of 167,086[36] in 41 square miles,[37] Oceanside is the third-largest City in San Diego County, California. The City grew dramatically since 1970, when its population was 45,000. Oceanside is the northernmost City in San Diego County. It has 3.5 miles of beach, a 1,000-boat slip harbor with amenities, and one of the longest wooden piers on the West Coast.

Oceanside also boasts the largest of the California missions (Mission San Luis Rey de Francia) and several regional museums,[38] including the California Surf Museum, the Mission San Luis Rey Museum and the much lauded Oceanside Museum of Art. It has several theaters, Mira Costa College, El Corazon, 18 parks, numerous golf courses, two senior centers, and three community resource centers. Universities close to Oceanside include California State University San Marcos, University of San Diego and the University of California at San Diego.

Oceanside is located 35 miles north of the City of San Diego, and just south of Marine Corps Base Camp Pendleton, the busiest military base in the United States. Directly north of Oceanside is Orange County, which offers many opportunities to connect with markets for recyclable materials in the Los Angeles Basin and through the major shipping port in Long Beach. South of San Diego County is Mexico, which historically has purchased many materials and products discarded from the Oceanside area.

The mainstays of the Oceanside economy have been tourism and the proximity of Camp Pendleton.[39] Agriculture is also important to Oceanside's economy, particularly the growing of tomatoes, avocados, citrus fruit, nursery stock, and flowers. Oceanside has diversified its economy in recent years, and now also hosts sporting and recreational goods manufacturers, biotech and medtech companies.

Existing Services

Key documents, policies and data were reviewed to provide this brief overview of the existing system. Zero Waste Associates requested copies of documents and URLs available from the City and researched other sources of data. This resulted in a thorough understanding of the current policies, programs and facilities that constitute the discard management system for reuse,

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[36] Source: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table

[37] Source: http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID=346&JUR=Oceanside

[38] Source: http://www.ci.oceanside.ca.us/

[39] Source: http://www.ci.oceanside.ca.us/about/history.asp

recycling, composting and regulated materials (e.g., household hazardous waste, sharps and fluorescent lights) in Oceanside.

Collection Services

In 2010 Oceanside extended its agreement with WM through 2023. With that extension, the City negotiated a significant number of new services.

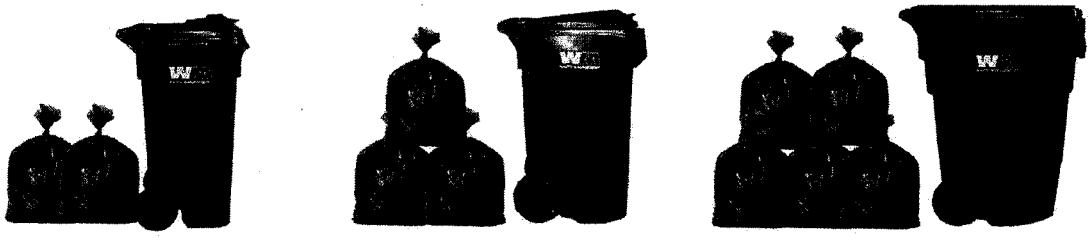
Residential Services

Beginning in January of 2012, all residents received new trash and recycling carts: gray for trash, blue for recycling and green for yard waste collections. Each type of cart is available in three sizes: 35-gallons, 64-gallons, and 96-gallons. Base service includes the following:

- One Trash Cart
- Up to 3 Recycling Carts
- Up to 2 Green Waste Carts

The new service started in January 2012. Residents were provided the opportunity to select their cart size before the rollout, and were also provided a free exchange to get a different cart size for up to 90 days after delivery, and one additional time thereafter, to accommodate changing household sizes. If single-family residents did not select their cart size initially, WM delivered as the default 96-gallon sized carts for trash and recycling. For homeowner's associations or a complex with more than one unit and each individual unit has trash and recycling carts, WM delivered as the default 64-gallon sized carts for trash and recycling.

35-gallon **64-gallon** **96-gallon**



Reduce your waste; Reduce your costs

There is a new discount for residents who select a 35-gallon cart. The regular rate for a 96-gallon trash cart is $19.44/household/month. The small quantity generator discount rate for a 35-gallon

trash cart is $17.18/ household/month.[40] This amounts to a **savings of $27.12 per year**, which incentivizes recycling and waste reduction at home. The new carts are also easier to roll to the curb and hold more. Instead of having to separate bottles, cans and plastics from paper and cardboard, residents can now put them all together in the blue recycling cart. And the blue and green carts are provided at no additional cost. This new collection system provides enhanced convenience for residents and increases recycling capabilities, so that they don't need as large a cart for trash.

WM will collect all these materials in new trucks that are powered by compressed natural gas (CNG). These new fuel-efficient vehicles will replace the old diesel-fueled trucks. When fully implemented, this clean air solution will result in a reduction of emissions equivalent to removing more than 3,100 cars from Oceanside roadways every day. This change will have a significant impact on reducing the City's carbon footprint. Implementation of the new single-stream recycling program will significantly increase the current diversion rate.[41]

A Guide to Bin Use from WM and Green Oceanside's Rollout Brochure is below.

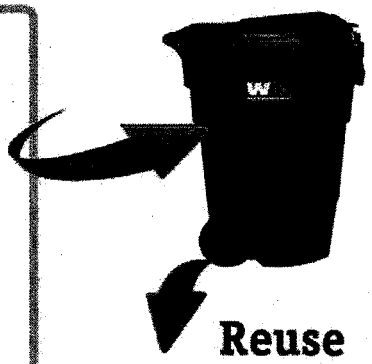
[40] For more info, City website is: http://www.ci.oceanside.ca.us/Public_Works/Default.asp. This type of discount program is called "Pay As You Throw" in the industry (see: http://www.epa.gov/payt/).
[41] In Del Mar, WM increased recycling 50% when single-stream was introduced.

Where Does it Go?

Recycle

You can now place it in one cart!

- Plastic containers 1-7
- Water bottles/juice bottles/milk jugs
- Aluminum/tin cans
- Cardboard/12-pack soda boxes
- Junk mail/magazines/phone books
- Glass bottles/jars
- Newspapers/inserts/magazines
- Office papers
- Cardboard egg cartons
- Empty aerosol cans
- Pie tins
- Computer/white paper
- Coupons
- Brown paper bags
- Cereal boxes (lining removed)
- Tissue boxes
- Clean pizza boxes
- Laundry detergent boxes/bottles



Reuse

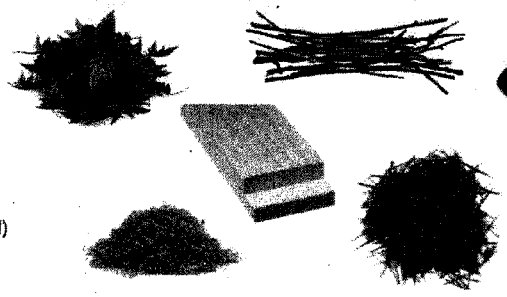
Recycling saves resources

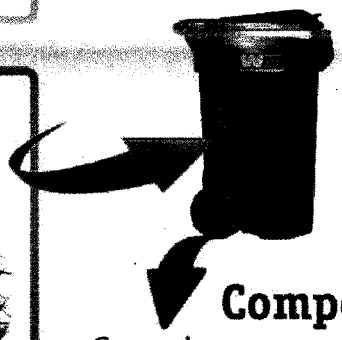
Recycle plastic bags at your local grocery store

Green Waste

- Lawn clippings
- Leaves and weeds
- Tree branches and shrubs
- Garden trimmings
- Sawdust
- Wood (untreated, not painted)

** Please keep free of trash*





Compost

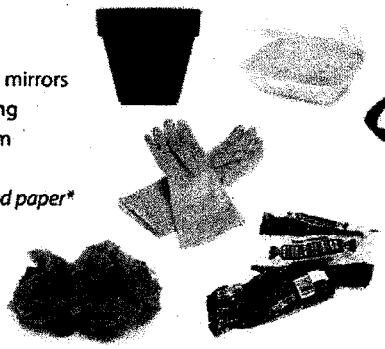
Greens become compost

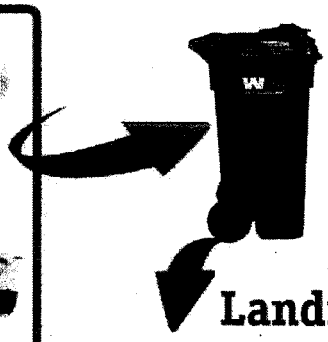
Free compost for Oceanside residents at El Corazon compost facility

Trash

- Waxed paper
- Food wrapping
- Ceramic dishware and pots
- Floor sweepings
- Candy wrappers
- Paper towels and tissues
- Broken glass and mirrors
- Styrofoam packing peanuts and foam
- *Food waste**
- *Dirty or food soiled paper**

** These materials are compostable.*





Landfill

Trash goes into landfills

Commercial/Multi-Family Services

WM provides commercial and multi-family services using bins ranging in size from 3 cubic yards to 4 cubic yards, which can be serviced up to six days per week. Commercial customers may also put out up to four trash cans, which can be serviced one time per week, Monday through Friday.[42] Trash service for apartment buildings of 4-10 units is provided by bins and/or rolling carts. The City provides a program to apartments to incentivize and encourage recycling. Recycling service for apartments is charged based on the number of units in the building. For every 25 units, the City requires a minimum of two 96-gallon recycling carts. Trash service is charged based on service level. [43]

The City's staff also helps businesses and multi-family dwellings save money by reducing their trash needs and increasing their recycling services. Interested businesses and apartment building managers or owners may request that the City conduct a waste audit, to help determine proper service levels.

After the audit, while supplies are available, the City will provide apartment buildings with blue totes to make recycling more convenient for residents. Apartment buildings with four or more residential units are eligible to receive these reusable recycling totes for all residents to use, as well as outside containers, signage and educational materials. City staff also makes presentations to teach residents how to recycle and reduce waste. The property management company's support is required to ensure sustainability of these programs.

Greening the Business Community

Businesses that are leading the way locally to recycle at work include the Wyndham Hotel, Mira Costa College, Hill Street Café, Genentech, Coca-Cola Bottling, and Tri City Hospital. Under its new contract, WM and the City will work together to establish a Green Business program. This program will work more closely with the business community to waste less and recycle more. For instance, small businesses downtown have space constraints limits recycling accessibility. City staff helps them explore shared bins in alleys as one way to recycle more.

The City's Green Oceanside team offers technical assistance to help businesses reduce waste, recycle, and purchase in a sustainable manner. Oceanside also provides some free recycling containers for businesses to help them get started.

Businesses can call the Recycling Hotline at (760) 435-5015, to schedule an appointment. The City has dedicated staff resources to support the Green Oceanside campaign in an effort to promote collaboration with the City's recycling, water conservation, and storm water programs.

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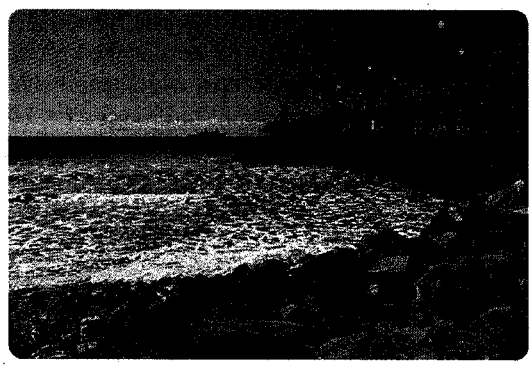
[42] For more info: http://www.ci.oceanside.ca.us/gov/water/recycling/comguidelines/default.asp

[43] All commercial, multi-family, master-metered and manufactured home trash accounts must be set up directly through WM due to the large variety of trash and recycling service and rate options. For rates, go to: http://www.ci.oceanside.ca.us/gov/finance/revenue/utility/rates.asp

Recycling in Public Areas



The City continues to work on recycling in public areas. Oceanside obtained grant funds from CalRecycle that will be used to place 100 granite block recycling containers in the Strand and along the harbor. WM began servicing 25 containers by the pier in the fall of 2011, and the remainder of the Strand by June 2012. The rest of the harbor will be set-up in 2012/2013. WM's contract calls for them to increase the servicing of 25 containers more each year. This recycling program was initially started by the sponsorship of the first recycling container at Buccaneer Beach, by Girl Scout Troop 1314.

To encourage community participation, the City has developed a sponsorship form for businesses to sponsor the remaining needed public recycling containers for beach and park areas. This is particularly important around the beach areas, as most visitors to Oceanside come to enjoy the coast.

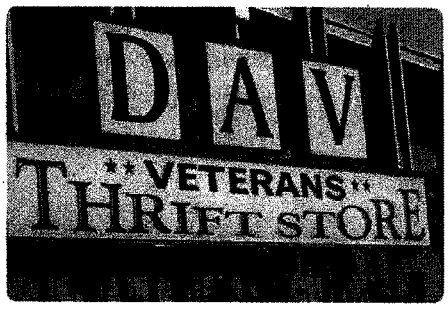
Green Tourism – Green Destination

Visitors are also becoming increasingly interested in patronizing green hotels and locations[44] As many as 50,000 visitors may come to Oceanside on a typical beach weekend, requiring additional waste and recycling resources. Recycling containers provide both additional capacity and Green alternatives for the needs of these visitors that fuel the local economy. Oceanside also provides some free recycling containers for public events such as parades, street fairs and community festivals to help them recycle more.

"As many as 50,000 visitors may come to Oceanside on a typical beach weekend, requiring additional waste and recycling resources."

Reuse

In addition to Waste Management, there are a number of reuse and recycling facilities operating within Oceanside and nearby. Dozens of reuse and repair businesses and nonprofit organizations have been identified. One of the largest reuse operations in Oceanside is the Disabled American Veterans (DAV).



[44] As an example, Atlanta established a Zero Waste Zone in their downtown to try to attract more "Green" convention and tourist business.

Other Community Services

WM also provides the following additional community services through their contract with the City:

Curbside Cell Phone and Household Battery Collection –Residents may place unwanted cell phones and used household batteries in a clear plastic storage bag and place them on top of their recycle cart for collection. Used batteries accepted for collection are AA, AAA, C, D, 9-volt, Alkaline, Rechargeable, Lithium and coin cells, and small button-size.

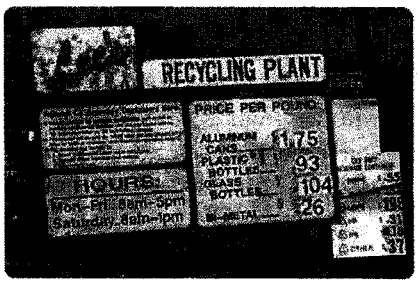
Buyback Recycling Center – Located at 2880 Industry St., the Buyback Recycling Center is open Tuesday through Friday, between 8 a.m. and 4 p.m. Residents can bring CRV aluminum cans, plastic and glass bottles, newspaper, mixed paper and cardboard to recycle. Also accepted are used household batteries, used motor oil, antifreeze and oil filters.

Electronic Waste (E-Waste) Collection and Drop-off – Residents have two ways to recycle electronic items such as televisions, computers, printers and fax machines. WM will retrieve up to five e-waste items three times annually at curbside, or E-Waste may be dropped off at WM's Buyback Center at no charge.

Sharps Drop-off and Mail Back –Residents can use the free drop off container at WM's Buyback Center. To ensure safe disposal residents are required to place their items in a red biohazard container with a sealed top or in a see-through container like a water bottle or milk jug with the top taped. Additional Sharps kiosks will be placed at the City's two senior centers beginning in Spring 2012. WM also provides a Sharps mail back program for convenient disposal from home (see: http://medwaste.wm.com/).

Bulky Item Collection – For items that are too large to put into trash carts, WM will retrieve up to five large items such as furniture or appliances three times annually. Advance notice is required. Twice annual bulky item citywide cleanups occur in the spring and fall, and residents can place items out at no charge during those weeks. Cleanup weeks are posted on the WM and City's websites. WM collects bulky items in a flat bed truck and takes metals to Lee's Iron & Metal in Vista. WM is required to handle these items according to the following hierarchy:

- Reuse as is (where energy efficiency is not compromised)
- Disassemble for reuse or Recycling
- Recycle
- Disposal



WM has agreed not to landfill any bulky items unless they cannot be reused or recycled.

Household Hazardous Waste Drop-off – For safe disposal of items such as paints, household and yard chemicals, car batteries, fluorescent tubes, thermostats, and other hazardous and toxic material, a free drop-off is available every other Saturday, by appointment for Oceanside residents. Residents may bring 15 gallons or 125 pounds of material for drop off at one time. They can also bring used motor oil, antifreeze and oil filters to WM's Recycling Center Tuesday through Friday, 8 a.m. to 4 p.m., without an appointment.

Holiday Tree Collection – Holiday trees are collected curbside for the first two weeks following Christmas on regular collection days. Trees taller than six feet must be cut in half, and all decorations must be removed, including tinsel, lights, ornaments and tree stands. Flocked trees cannot be recycled, so they are collected as trash on regular collection days.

Recycling Processing

Waste Management currently processes, on a limited basis, materials bought from the public to their collection yard in Oceanside. Under the new contract, WM started collecting all recyclables in one container (called "single-stream") from businesses in June 2011. In January 2012, the City converted to single-stream recycling for residential customers as well. Initially, WM is collecting materials curbside from residents then shipping them in transfer trucks to Allen Company in San Diego. WM is constructing a new single-stream materials recycling facility (MRF) in Orange County and will process Oceanside's recyclables there once that facility is operating.

WM also collects source separated and mixed construction and demolition debris. They take mixed construction and demolition debris to WM's Orange County facility and sometimes to EDCO in San Marcos. Clean construction and demolition debris also goes to Moody's in Oceanside.

Lee's Iron & Metal in Vista is a major scrap dealer for the region, and has been in business for over 50 years. They have heavy-duty equipment for sorting and processing all types of scrap metals. They play a vital role in servicing businesses in Oceanside, particularly for major accounts and buying back directly from Oceanside residents.

BEN Recycling opened about 16 years ago in Oceanside, recycling a full range of products, including all paper, steel and tin cans, plastics bottles, batteries (lead acid), and glass bottles. BEN has grown by double digits every year in the past twelve years. BEN mostly processes a lot of corporate accounts and provides collection services for some large businesses, although most businesses deliver their materials to them. BEN offers premium prices (more than CRV minimum values) to attract materials.

Ecology Auto is an auto parts salvage yard in Oceanside, next to BEN Recycling in an industrial area on the north side of the City off of Route 76 (at the Benet exit). Ecology Auto Parts is the leader in "self serve" auto parts/used auto parts, with locations throughout Southern California. They offer at discounted prices used auto parts and big truck parts for semis, trailers, and box van with environmentally friendly operations. They also buy scrap metals (ferrous only in Oceanside) and are one of the largest scrap metal processors in California. They play a vital role in addressing this important niche for salvaging of auto parts in Oceanside.

Construction & Demolition Recycling

Table 1 highlighted that the construction industry in 2000 generated about 9% of all the materials discarded by businesses that year, over 5,000 tons of materials. These numbers would be different if evaluated today, as the "construction sector" has been affected the most by the economy. However, this ZW Plan needs to ensure that there are appropriate policies, programs and facilities to address this major sector for when economic activity increases again.

Fortunately, there are some excellent construction and demolition recycling services available in Oceanside.

Moody's Recycling is a private construction and demolition debris contractor operating on leased land from the City of Oceanside at El Corazon. This is part of reclamation plans for the site, where U.S. Silica mined 18 million tons of material in the past. Moody's accepts about 300 tons per day of clean asphalt, concrete, brick and wood. Large blocks of material are crushed into road base. Cement is separated and mixed back into concrete and sold as recycled. Dirt is separated from mixed loads. If yard trimmings are mixed in with dirt, it is screened out and delivered to the Agri Service compost facility next door.

Moody's markets include a local nursery, where recycled materials are used to build roads between plants, and Agri Service, which purchases sand for soil amendment blends. Although Moody's sells dirt, they don't sell topsoil.

The City and local businesses get many benefits from hosting this facility. Moody's pays a share of its revenues from this facility to Oceanside. The City also delivers construction and demolition materials to Moody's and can take as much of the company's products as it wants, at no cost. Private businesses utilizing this facility save time and money in comparison to the high costs at landfills or other distant construction and demolition facilities. Moody's charges about $25/ton and is much closer than other sites. Competing facilities charge as much as $75/ton (e.g., Miramar and Edgar).

Materials from Moody's are also generally sold at 25% of the price of local competitors. Just considering tipping fees, to replace this service with facilities outside of Oceanside may cost current users about $50/ton more, or a total of about $4 million per year when operating at full capacity of 300 tons per day.[45]

Moody's also continuously supports local community projects, including a hiking trail around the Senior Center overlooking the El Corazon site, 50,000 tons to a ball field for remediation and "Green" sand for a sand sculpture contest made from recycled concrete.

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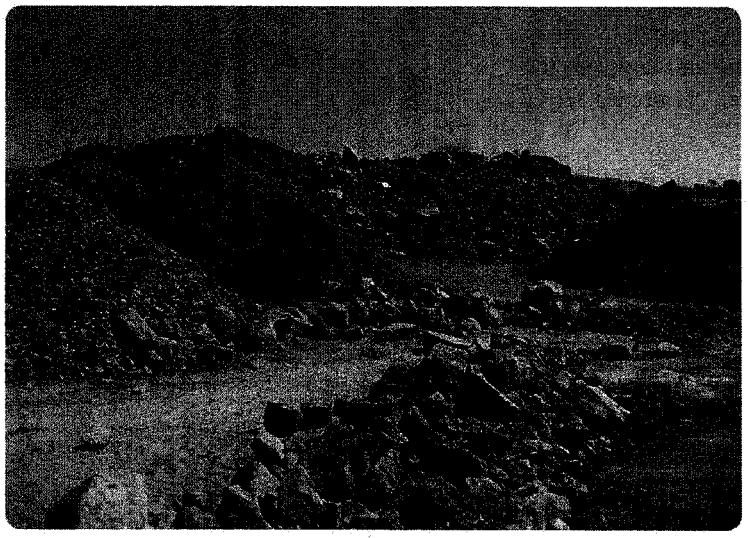
[45] Note: the 300 tons/day includes all the material received at the facility, which includes materials from outside of Oceanside. This is significantly more than the amount of ceramics noted in the Commodity Analysis for Oceanside above.

The City's contract with Moody's construction and demolition facility expires in November 2025, when they get to the planned grades for the reclamation of the site as part of the El Corazon Reclamation Plan. To extend this facility, the City could explore the possibility of extending Moody's lease for a smaller portion of the site than they are using now, to continue with limited operations after they get to grade. Moody's could more carefully balance their incoming supply of materials and outgoing sales of materials to decrease the amount of materials onsite.



Alternatively, they could continue to process materials onsite at El Corazon until the land it is operating on is ready to be built upon according to the El Corazon Master Plan.

Processed materials could be shipped to other locations in Oceanside or the vicinity for longer-term storage and a sales yard (although this would add costs to Moody's, decreasing their competitiveness in the marketplace). As Moody's currently sells products for so much less than their competitors, there is likely room for them economically to do this, without losing much of their business.

Composting

Agri Service

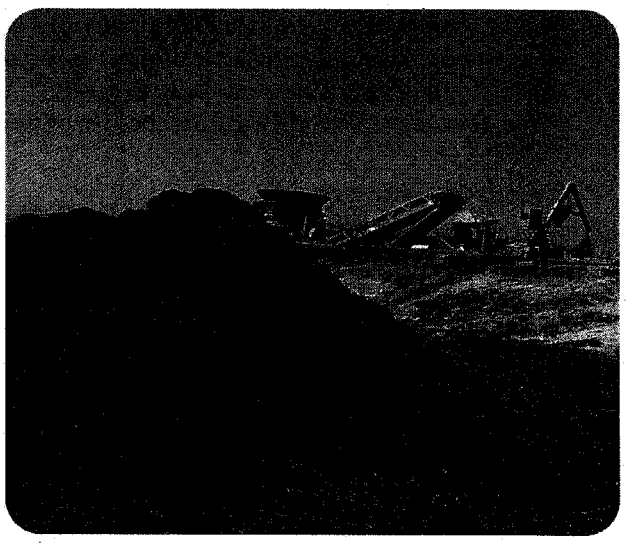
Recognizing that traditional methods of yard trimming disposal such as open burning and landfilling were both inefficient and environmentally unsound, the City of Oceanside partnered with Agri Service, Inc. (ASI) in 1995 to develop the El Corazon Compost Facility on a former silica mine located within the City. The City is only one of two communities in the county that supports composting by hosting a facility on its property.[46]

The El Corazon Compost Facility was designed to recycle yard trimmings and clean wood discards into beneficial soil amendments and mulch products. The facility has the added benefit of reducing the City's carbon footprint by eliminating the transfer of approximately 50,000 tons of organics a year. Further, Oceanside has also avoided the stigma of utilizing its yard trimmings as alternative daily cover (ADC).[47] ADC, is material used for covering refuse in the landfill. Ground yard trimmings are one of the most common materials used for ADC. California Public Resource code "establishes that ADC use is considered diversion through recycling," despite the

[46] The City of San Diego hosts a composting facility at the Miramar landfill, which it owns.
[47] Alternate daily cover, or

fact that this material is being buried in the landfill. Although this may be legal, Agri Service and many others view this as inappropriate.[48]

The County has evaluated where alternative daily cover is generated throughout the county, and concluded that the presence of a local composting facility is why ADC is so low from Oceanside. Finished products produced at the facility are used extensively by both residents and on City parks and landscaped spaces, and sold to many businesses. These high quality products provide significant environmental benefits, including reduced fertilizer and pesticide use, water conservation, and decreased water pollution.

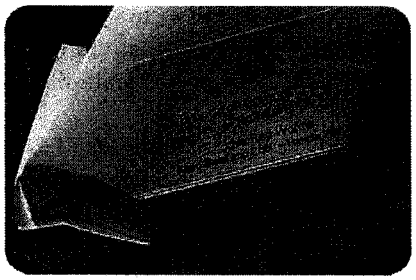


ASI's El Corazon operation has a full solid waste facilities permit, which is currently being modified to accept discarded food materials. Other modifications include the addition of an aeration system to reduce the generation of both odor and volatile organic compounds. The new facility is expected to be functioning by fall of 2012, and will be the first aerated compost facility in Southern California.

Oceanside has researched the feasibility of adding biosolids to materials composted at El Corazon. Even with aeration systems, the City found that odor was not sufficiently controlled and the end product was not well accepted by end users. In addition, the National Organic Program does not allow the use of biosolids on organic farms, creating a negative stigma for the compost.

The El Corazon Compost Facility partners with Oceanside to provide education and giveaways to residents:

- The compost giveaway program allows residents to self-load compost during public hours for free. Pick-up trucks are loaded for $2 on designated days twice a month. Residents make between 300 and 1,000 visits a month.
- Worm casting compost tea and red worms for home composting are also available free to residents.
- Local community gardens are supported with free compost.
- Monthly "Home Grown" classes are conducted on sustainable food production and organic gardening.
- Free composting classes are also conducted for residents throughout the year.



[48] For more information, see http://www.calrecycle.ca.gov/lgcentral/basics/adcbasic.htm

- In 2011 the City subsidized home worm bins and 100 residents took advantage of the program. Plans are to continue this program in 2012.
- ASI has been a continuous partner/sponsor in the City's Green Week program since that started in 2008.

Since its inception, the ASI El Corazon Compost Facility has processed over 1 million tons of yard trimmings and wood into high quality soil amendments, mulch and potting mixes, making Oceanside a leader in sustainable organic recycling. ASI recently developed a 46 page digital catalog highlighting all the products they sell.[49] Under their new contract with the City, ASI also shares revenues with the City from the sale of these products.

Evergreen Nursery

Located at 3231 Oceanside Boulevard in the City, Evergreen Nursery has three of the nursery's 80 acres permitted for composting yard trimmings and stable bedding. It is permitted to handle up to 10,000 cubic yards of active compost material. The nursery sells a full line of soil and landscape materials, including soil amendments and mulches. Some landscapers bring their yard trimmings to this facility to process. They also have a program for recycling black plastic plant pots. Customers receive a store credit for returning these containers, receiving a nickel for one gallon pots, a quarter for 5 gallon pots, and seventy-five cents for the 5 gallon size.

Outreach and Education

Oceanside continues to promote recycling through an aggressive marketing campaign targeting different sectors of the community through print, television, media, presentations at local community events, and printed bilingual materials. The Green Oceanside newsletter is emailed to all City residents bi-annually. Green Oceanside articles comprehensively describe all environmental programs within the City, including recycling, reducing waste, water conservation, compost, and storm water pollution prevention.

The City has focused outreach efforts on the multifamily and commercial sectors, including very popular bilingual presentations. All materials handed out at community events (reusable bags and bottles) include Green Oceanside information printed on recycled content paper. Efforts to focus on multi-family units and the commercial sector have included increased mailings and face-to-face direct contacts with both residents and property owners. Informational reusable bags are distributed for residents to use to transport recyclable items to their buildings recycling area. Staff also meets with representatives of participating management companies to review available recycling services and education programs by request.

The "Reduce Waste" campaign has been expanded through targeted outreach and education programs. Local businesses are offered enhanced recycling and start-up kits along with friendly staff support. Audits are also offered to help businesses become more sustainable. City staff also attends multiple Main Street Oceanside and Chamber of Commerce events and meetings to promote its programs.

[49] See: http://www.agriserviceinc.com/product-digitalcatalog.html

"The Green Oceanside Environmental Education Program includes presentations, lectures, and events that support waste reduction, reuse, recycling, composting, water conservation, storm water pollution prevention and energy conservation."

Some components of outreach are conducted through the City's recycling hotline, the Solid Waste and Recycling Division webpage and through various quarterly publications and mailings to all City residents.

City staff training - Oceanside provides annual training that is required for all City employees. The training includes a presentation on recycling, its importance and state mandates. Staff has a Green Oceanside booth at the annual employee recognition event to promote the idea that a Green City starts with its employees ("Lead by example").

Green Week - In 2011, the City of Oceanside celebrated its third annual Green Week program. Several thousand people participated in the full Green Week program, which included an Environmental Youth Art Contest, Environmental Film Festival, library workshops, free electronic waste event, beach cleanup, and a cumulative Green Fair. Staff is currently in the process of preparing for it's 4th Annual Green Week event, which is now being boasted as North County's largest Earth Day event, due to a change in time from March to April 23rd to the 29th.

Day Without a Bag - The fourth annual "Day Without a Bag"[50] event in December 2011 was sponsored by dozens of local businesses and community groups. There were over 30 distribution sites, along with 40 volunteers to assist with the day's effort to promote the use of reusable bags instead of plastic. Over 5,000 reusable bags were handed out.

Use a reusable tote bag instead of plastic.

Other Events - The Green Oceanside outreach team was also present at several other events including, among others, Harbor Days (50,000 attendees), Earth Day, Employee Appreciation Fair, Operation Appreciation, Pride Festival, and Race Across America. The City continues to provide Green Oceanside presentations and lectures to local community groups and classes.

The City also educates the public about all current product bans, including but not limited to, sharps and medical waste, all HHW, e-waste, and oil.

Environmental Education - The Green Oceanside Environmental Education Program includes presentations, lectures, and events about waste reduction, reuse, recycling, composting, water conservation, storm water pollution prevention and energy conservation. Other campaigns such as the "Three Rs," "Reduce Waste" and the "One Less Plastic Bag" initiative continue to be successful.

[50] See www.NoBagDays.org.

"Staff continues to expand all recycling programs at schools by providing containers, educational materials, and signage to encourage recycling."

Environmental Youth Art Contest - The City's Green Oceanside Environmental Youth Art Contest provides prize incentives to teachers and students throughout the jurisdiction. Winning students and participating teachers receive "green" school supplies for their classroom. Winning art from the contest is utilized for designs on City outreach materials, including Green Oceanside reusable bags that get distributed to the public at local events throughout the year.

Palmquist Zero Waste School - Oceanside supports the Palmquist Elementary School Zero Waste recycling/compost/gardening project by providing support for recycling and waste reduction programs. This program addresses the benefits of recycling, composting, water conservation, healthy soil, and a healthy diet. Other schools interested in pursuing similar programs will be assisted as well.

Other Partners - The City also partners with Waste Management, which contracts with I Love a Clean San Diego, to provide educational programs on reducing waste, reusing, and recycling to all Oceanside Unified Schools throughout the year. Staff continues to expand all recycling programs at schools by providing containers, educational materials, and signage to encourage recycling.

Camera Enforcement Program

Oceanside monitors problem commercial locations through its Camera Enforcement Program. WM submits photos of accounts that are having constant overflows or contaminated recycling loads to the Solid Waste and Recycling Division. City staff then conducts follow-up inspections with the businesses to resolve the issue and encourage recycling and waste reduction. Through recycling business audits and the Camera Enforcement Program, the City monitors businesses that are not recycling and makes personal contact with these customers, informing them of the state mandate and City ordinance. Staff also highlights the environmental and economical benefits of recycling, including the reduced costs that come from avoiding collection, disposal and overload fees. Code Enforcement also assists with enforcing the City's Municipal Code, which requires the separation of recyclable materials from trash.

Landfills Used by City

Discarded materials collected by WM are now taken under its new contract with the City to its El Sobrante Landfill in Riverside County. Prior to the new contract, most of the material went to the Prima Deshecha Sanitary Landfill in San Juan Capistrano, Orange County. About one-third was also taken to three disposal sites in San Diego County: Otay Landfill, Sycamore Landfill and the West Miramar Sanitary Landfill. In 2010, 108 tons were taken to the refuse-to-energy facility in Commerce and six tons were taken to the Southeast Resource Recovery Facility (SERRF) in Long Beach.

4. Zero Waste Recommendations

4a. Changing the Culture to Zero Waste

In developing a Zero Waste program, the City will need to build upon its existing outreach programs and expand them to meet the challenge of Zero Waste. For programs to be sustainable and effective there needs to be total participation, "walking the talk," and multi-faceted media and community-based social marketing.

Key components that will support the culture change needed to get to Zero Waste include:

- Outreach and Education
- Public Awareness
- Training
- Enforcement and Reinforcement

Outreach and Education

As part of the implementation of this ZW Plan, Oceanside should include the message in all education and outreach materials "Reduce and Reuse first, then Recycle and Compost the Rest."

The City should transform the Green Oceanside campaign to partner with local nonprofit organizations and businesses to help with outreach, education and awareness components of implementing this ZW Plan to get the community more involved.

Outreach and Education for Businesses

Commercial, multifamily and school buildings should be identified and recruited to sign Zero Waste resolutions and work with the City to initiate source separation programs in their buildings. Oceanside should start first with the larger properties and buildings. The City is responsible under AB341 to identify and notify all businesses that generate over 4 cubic yards of waste per week of this new state requirement, and all multi-family dwellings with five units or more.

Cities throughout the state are organizing their outreach efforts now to comply with this requirement of AB 341, although CalRecycle has indicated that technically cities are not required to do such outreach until July 1, 2012.

The Solid Waste and Recycling Division should help with implementation of new programs by businesses and employee education. Results should be reported to all building owners that must show compliance with the new state law. The City can finance some of this through CalRecycle grants.

Workshops bringing experts in the industry and businesses who have already implemented Zero Waste programs to meet the mandatory commercial recycling ordinance would also help with the transition. This would use the opportunity of this new state requirement to educate local businesses on the City's Zero Waste goal, and to show them how they can benefit from their participation.

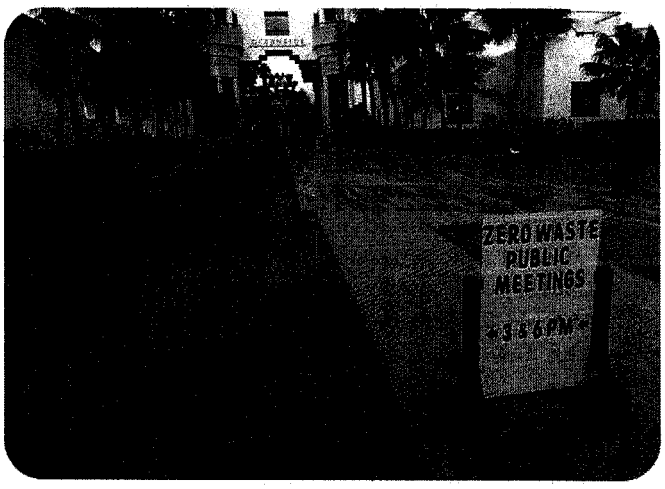
Ventures such as office recycling can be accomplished by educating businesses on how to organize maintenance of their offices to capture recyclable and reusable materials.

Public Awareness

Each time new ordinances and infrastructure are adopted, a citywide awareness program informing the public of the new policies and how to use the new system is necessary. The startup effort underway right now for the extended WM contract is a great example of the type of comprehensive awareness program that should be done each time there are major system changes. These programs should include all schools as well. Public buildings and parks should be the first to convert to new programs to set an example for the public.

Behavior change can further be accomplished by an aggressive social marketing campaign. In order to instill the "Three R's," Reduce, Reuse and Recycle, an interactive media campaign should be developed utilizing newspaper ads, radio and local TV spots, websites, listserves and other digital and social media) that focuses first on reducing and reusing, then recycling and composting the rest. Display boards at community venues should be designed and constructed to demonstrate the need and ease of recycling and notify residents of rule changes and upcoming events.

Numerous studies document that education alone does not alter behavior. Conventional marketing, which often relies heavily on media advertising, can be effective in creating public awareness and understanding of issues, but is limited in its ability to foster behavior change.



Community-based social marketing is based upon research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level, which focus on removing barriers to an activity while simultaneously enhancing the activity's benefits. To be effective, programs must be carried out at the community level and involve direct contact with people.

Collaborating with Camp Pendleton on these outreach and education programs would help both on base and off, as many Oceanside residents work there and what they learn in one location will help in the other, particularly if the message is the same.

Schools Programs[51]

In a Zero Waste community, schools are a very important component to create an educated community that is aware of the harmful effects of waste on the environment. Students should be

[51] The Schools section was based on a proposal by a student of the California Resource Recovery Association Resource Management Certificate Program who lives in Oceanside, Jenna Roripaugh.

given the information and education to create a paradigm shift from trash to resources. This paradigm shift will also spread to parents and into the community. Schools should instill a feeling of responsibility and stewardship toward the environment. A comprehensive Zero Waste Program for schools would include an educational component, infrastructure and leadership.

Palmquist Elementary School has already adopted such a Zero Waste Program and four more schools are considering doing so for the next school year. The City is utilizing grant funds to support the purchasing of recycling containers and compost bins to service the schools lunch program. For a program to be sustainable and have longevity, the program should be instituted throughout the School District.

Education

Schools should be required to analyze their discarded materials and develop a Plan to reduce, reuse and recycle those materials. Involving students in the process of determining how much and what types of waste is generated will give them ownership and the chance to effect change in their immediate environment. Zero Waste information should be integrated into the science curriculum, coordinated closely with Life Lab community gardens discussed below in the composting section.

Schools Infrastructure

Schools need a system for collection of discarded materials. This should include proper bins with good signage. Students should assist in the collection of materials from bins to further their education and ownership of the program. Schools should allow students to benefit from sales of materials at each school so that funds generated are reinvested in the school in support of athletics, art and music or other programs selected by those involved. The School District should also not allow difficult to recycle materials at the school, such as expanded polystyrene. The School District should also adopt an environmentally preferable purchasing program to support the markets for materials collected.

Schools Leadership

Administration, teachers, cafeteria staff, custodians and a program director are key to the success of a Zero Waste Program for schools. The latter may be most appropriate to hire at the School District level. Funding for such a position could be obtained from the savings that accrue from reduction in waste collection and disposal costs. Each school should clearly articulate the role of all these players so that everyone feels a part of the program. Schools could compete for who has the best program to instill a spirit of camaraderie and to focus more attention on this effort.

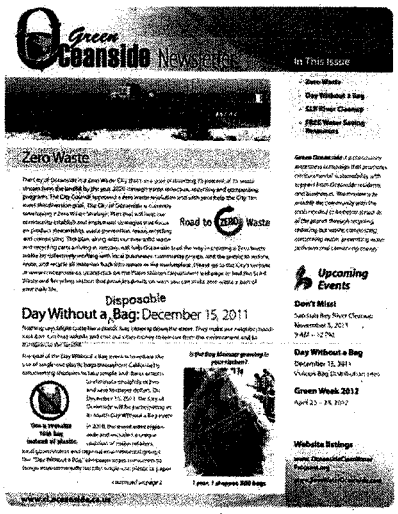
Training

Zero Waste companies utilize the "total participation" model which emphasizes the training of all employees from leadership to administration and operations, empowerment of employees to create changes everyday, tracking and re-investing savings back into the program, and engagement of vendors and clients in the Zero Waste program.

A "how-to" guide should be developed for and distributed to businesses to learn how to reduce wasting. YouTube videos can be produced to showcase restaurants in the area that have

implemented food reuse programs (e.g., City of Santa Barbara). The success of the non-recyclable food service container (expanded polystyrene) ban in Santa Barbara was in large part due to a comprehensive and easy to use website. The website has been expanded to include distributors, Zero Waste events, success stories, FAQs and useful links.[52] The availability of these types of resources is key to a successful program.[53]

All departments involved in promotion, rulemaking, initiation and/or enforcement of resource management policies should have a training session that covers the new ordinances, policies and programs. This is very important in departments where new policies will change their procedures. City vendors and contractors will also be involved in the training to maximize the upstream opportunities provided by reduced packaging, reduced transportation, and green purchasing practices.



All City buildings and facilities (athletic fields, offices, hospitals, airports, bus stations and libraries) must have recycling bins and clear directions for people using these facilities. For convenience, all drink dispenser machines should have recycling bins adjacent to them. According to page 21 of their contract, WM will provide collection services free to all City facilities as part of the overall agreement.

By continuing to train all City staff, Oceanside can be the model for its citizens and businesses. By "walking the talk" and leading by example, the staff will also be able to effectively communicate the importance of the ZW Plan. Through these efforts they will have experienced the ease of implementation, and the savings and benefits to themselves and the community.

Enforcement and Reinforcement

Communities adopt policies so that people know how they are supposed to act. People don't drive on the right side of the road in New Zealand or the United Kingdom. Good policies, incentives and continued communications help people change their behavior. In social marketing, they highlight that people need to be told something 6-11 times before they remember to do something differently.

Instead of rigorous enforcement of new policies for Zero Waste, this ZW Plan recommends extensive outreach, education, awareness, training and reinforcement programs. Several Zero Waste Communities have hired college students, interns or others to knock on the doors of every business in town to let them know about the new policies that have been adopted. Through those direct contacts, staff show businesses how they can also save money by wasting less and recycling more while they comply with the new policies.

In the residential sector, some of the most effective tools have been to provide multiple warning notes on top of containers when there have been mistakes in how materials have been set out for

[52] See http://www.ci.oceanside.ca.us/gov/water/recycling/comguidelines/default.asp
[53] See http://www.santabarbaraca.gov/recycling-trash/businesses_food.htm#debut and http://www.smgov.net/Departments/OSE/Business/Non-Recyclable_Food_Service_Container_Ban.aspx

recycling. Rather than exacting fines or penalties, these efforts are intended to help educate the user of the new policies, and to remind them when they forget.

This ZW Plan recommends focusing on such reinforcement approaches rather than more rigorous enforcement tools to get everyone working together for Zero Waste.

4b. Reduce and Reuse

Reduce First!

The top priority for Zero Waste policies and programs is to reduce waste first. All Zero Waste businesses have highlighted that they save the most money by designing waste out of their production processes or operations. Oceanside could help residents and businesses reduce waste through purchasing, waste audits, recognition of model programs and rate incentives.

Purchasing and Supply Chain Management - The City should encourage residents and businesses to minimize waste in their purchasing and to ask suppliers to either design wastes out or take back their products or packaging when done. A model policy should be designed for implementation at the City, and promote it as a model for private businesses in Oceanside.

Residents should be encouraged to buy reusables, recycled and durable products. The program could be promoted through the sale of aluminum or steel water bottles at City recreation facilities and cotton or recycled PET durable shopping bags at local retailers.

The City should buy products from reuse stores and supply them with used furniture and equipment. City departments should be encouraged to allow all legal documents and forms to be filed on-line without the use of paper. The City could review what types of papers are produced in which locations, and then evaluate how an electronic transaction could replace the paper transaction.

"The City should encourage residents and businesses to minimize waste in their purchasing and to ask suppliers to either design wastes out or take back their products or packaging when done."

Waste Audits - The City and Waste Management provide free waste audits to businesses. These audits should focus on eliminating waste and setting up reuse systems (e.g., reusable shipping containers and pallets). Oceanside will commit resources to supporting these waste audits and additional staff for technical assistance to commercial and industrial businesses and institutions (e.g., government offices, schools, colleges, hospitals) to help them identify opportunities to reduce waste. The City could also explore with other Oceanside departments and utilities the possibility of doing integrated environmental audits like those performed by StopWaste.org to help businesses in one program on waste audits, water audits and energy audits. This approach could supplement existing and developing programs with WM as a base, with the use of City staff and/or independent third parties that specialize in providing these services.

Recognition of Model Programs - Oceanside could organize an annual recognition ceremony of businesses that are Waste Reduction Award Program (WRAP) Award winners in Oceanside and invite elected officials and the media to this ceremony to salute their leadership (comparable to what the South Bay Business Environmental Coalition in Los Angeles has been doing for years). The City could give special recognition to Zero Waste businesses that have diverted over 90% of their waste from landfills and incinerators. Case studies could be posted on the City's website, in its newsletter and released as news stories for local electronic and print media to highlight as part of their efforts to cover sustainable and green businesses in the area. Oceanside should also ask Camp Pendleton to join in these efforts.

Rate Incentives - The new system that has been implemented this year includes a discount for residents who select a 35-gallon cart. The regular rate for a 96-gallon trash cart is $19.44/household/month (hhld/mo). The small quantity generator discount rate for a 35-gallon trash cart is $17.18/hhld/mo, a savings of $2.26/hhld/mo.[54]

In the future, if the City wants to increase diversion, residential rates could be adjusted over time until residents are charged the same amount for each 32-35-gallons of refuse service subscribed. This would be most appropriate to phase in once food scraps are collected weekly in green carts. This is known as a "linear" Pay As You Throw rate.[55] Under such a rate structure, if residents select one 35-gallon garbage cart as the amount of garbage service they need, it would cost "x." If they selected 64-gallons, it would cost approximately two times "x," and if they selected 96-gallons, it would cost approximately three times "x." In many communities this type of rate structure is phased in over time, by incrementally increasing the difference between the different levels of cart service available.

Similarly, if the City wants to increase diversion in the commercial sector, commercial rates could be adjusted over time as well. The City could negotiate with WM to revise rates for commercial bin service to eliminate volume discounts for more refuse service while maintaining the same total amount of revenue to WM. Alternatively, the City could adopt an AB 939 fee on the collection of solid wastes that increases with the number of collections per week and the size of containers.

Product Stewardship - Oceanside should be a strong advocate for Extended Producer Responsibility legislation and programs regionally and statewide to encourage producers and retailers to take back their products and packaging and reuse, recycle or compost them. All businesses in the City should be solicited to voluntarily take back products and packaging from customers that are otherwise difficult to reuse, recycle or compost locally, such as plastic bags, take out containers, batteries and universal wastes. A list should be posted on the City website of those businesses that respond along with nonprofits and government agencies that will take back products. Oceanside should work with California Product Stewardship Council members in Southern California to set up an area-wide website that will include similar lists from all communities participating. Those participating communities should then be partnered with to conduct social marketing and media outreach programs that encourages residents to patronize the businesses that are listed. Oceanside could also work with stakeholders to develop a Plan for those products or packaging to be properly removed from the City.

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[54] For more info, City website is: http://www.ci.oceanside.ca.us/Public_Works/Default.asp.

[55] Over 7,000 communities in the U.S. have some form of Pay As You Throw program. Detailed case studies and manuals on how to best structure it for individual communities are available at http://www.epa.gov/payt/.

Landscaping for Zero - Zero Waste landscaping and yard care should be supported, as well as use of native plants and xeriscaping as part of Master Gardeners and Master Composters programs. Brochures should be provided at City facilities on new laws concerning water conservation, Low Impact Development (effective 1/1/10) and Green Building (effective 1/1/11) Codes, and highlight ways to comply with those new laws that will also minimize waste.

Plastic Bags - A Plastic Bag Reduction Ordinance should be adopted as a priority. As noted above, most communities are now joining to adopt the model ordinance from Los Angeles County. Locally, Solana Beach Ordinance proposal was approved and is scheduled for adoption in May. Table 7 highlights communities that have already adopted such bans in California.

Table 7 - Local Plastic Bag Ordinances in California[56]

Adopted Bans (active)	Adopted Bans (not yet active)
San Francisco	Santa Cruz County
City of Malibu	City of Pasadena
Town of Fairfax	City of Monterey
City of Palo Alto	City of Sunnyvale
Los Angeles County	San Luis Obispo County
City of Santa Monica	Alameda County
City of Calabasas	City of Millbrae
City of Long Beach	
City of San Jose	
Santa Clara County	
Marin County	
City of Manhattan Beach	

In addition, Proposed Ordinances are formally and informally under discussion in over 55 communities around the state, including nearby in: Dana Point, Encinitas, Huntington Beach, Laguna Beach, and San Clemente.

To pursue such an ordinance, it would be best to collaborate with Solana Beach to propose the same approach. It would be best to convene stakeholders to discuss a proposed ordinance individually, then as a group. Key stakeholders would be those who will be most impacted, such as grocers and restaurants. One of the biggest variations that has occurred around the state is which types of businesses would be covered under the ordinance. This ZW Plan recommends meeting first with major grocers, as they are supportive of adoption of the Los Angeles model ordinance. Getting the support of their local General Managers will be important before meeting with other stakeholders.

[56] Source: plasticbaglaws.org

Once the parameters of which businesses are to be covered is figured out, then it would be appropriate to have a study session or workshop of the City Council to get broader public input on the concept. There may need to be several rounds of public participation for this to be done successfully. Depending on those who participate in the first meeting, the Mayor or City Manager may want to appoint a Task Force to review options and report back to Council.

After all the concerns raised through these stakeholder and public participation processes are concluded, then the ordinance should be ready to move forward for action at Council.

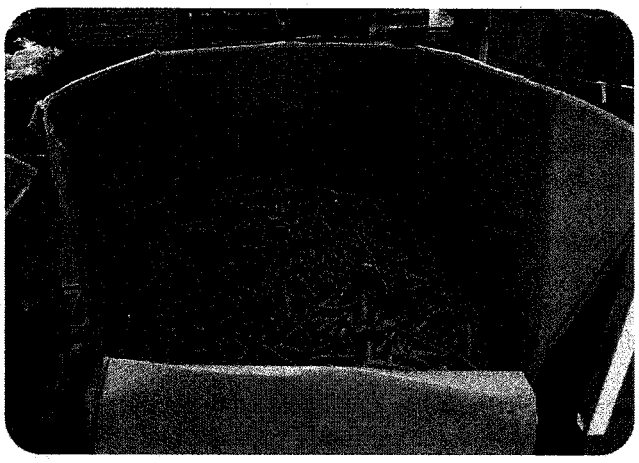
Throughout this process, and after adoption of a single use bag reduction ordinance, use of reusable shopping bags by residents should be encouraged. Free bags should continue to be distributed during Earth Day, Day Without a Bag and through local libraries for Earth Day and Harbor Days

Source Reduction to Minimize Food Loss and Landfilling

Source reduction strategies rest at the top of the Zero Waste hierarchy. They have a multitude of benefits over downstream methods, including simplicity, ease of implementation and lower start-up and management costs. They also reduce emissions resulting from decreased trucking and other "upstream" impacts. Recommendations for reducing wasted food can be found in the Appendices, and include methods for both residents and businesses. There are also a lot of good resources and tools available from the US EPA, including a food waste audit log and food waste management calculator.[57]

[57] See http://www.epa.gov/osw/conserve/materials/organics/food/fd-res.htm

Reuse



The estimated value of the reusable materials found in the Oceanside discard stream is over $2,000,000. Following are recommended reuse programs to capture that value to create jobs and re-invest these resources in the local economy:

Food Banks and Shelters

One of the major opportunities for reuse is promotion of food donation programs. Once source reduction methods are exhausted, edible food should be donated to food banks and shelters rather than thrown away. Both residences and businesses generate food suitable for donation, and the City of Oceanside has an extensive network of shelters. There are also two food banks in San Diego County contacted that can accept donations. As one in five Oceanside residents are food insecure (someone who isn't sure where their next meal will come from), diverting as much edible food from the landfill cart is that much more critical.

Capturing edible food may also have substantial financial benefits to the City. Between 2006 and 2010, Seattle Public Utilities invested $394,021 in funding for 19 hunger agencies to purchase equipment to safely transport, store and utilize donated food. Over a 10-year period, this investment is projected to divert 22,957 tons of edible food from the waste stream at a cost to the utility of $29 per ton. At a disposal cost of $53 per ton, the investments will generate an estimated **$1,216,721 in savings from avoided disposal costs** for the utility.

To learn more about diversion potential and how cost effective using food banks can be, please see the Case Study: Metropolitan Portland, Oregon "Fork It Over!" Program/Oregon Food Bank in Appendix E.

Feeding America San Diego is the county's largest distributor of donated food. Recently they relocated into a 44,000 square foot warehouse. The organization diverts about 2,500 tons a year of food that would have otherwise gone to the landfill. They also have volunteers and staff sort through and unpackage what can't be donated. Compostables are then sent for composting at the Miramar Greenery and the packaging is recycled.

Feeding America has some 8,000 volunteers and enough food flows through its facility to meet the needs of about one quarter of San Diego County's food insecure (more than 73,000 people receive food each week). The organization distributed over 20 million pounds of food in 2011, five million of which were fresh fruits and vegetables collected as part of the Fresh Rescue program.

In addition to being open to accepting both produce and non-perishable food from Oceanside, and having a refrigerated truck to pick up larger volumes (smaller volume pick-ups may be done by one of the organizations 190 partner agencies), Feeding America San Diego is willing to explore with the City a more organized, systematic approach for recovering donatable foods.

At the time interviewed, the other major food distribution organization, ***North County's Food Bank***, stated they couldn't do pick-ups in Oceanside, but would accept dropped-off non-perishable foods only, as they were at capacity for produce. In the past year, working with 97 Community Partner Agencies, they distributed over 1.5 million pounds of food from grocers, farmers, wholesalers, and food drives. Some 1.3 million meals fed 236,334 individuals, and after the beginning of the dramatic economic decline in 2008, demand for food increased nearly 80% and has remained at all-time high levels.

The Bread of Life Rescue Mission is feeding 10,000 people a month. The Fresh Rescue Program feeds 300-400 families a month. They can do pick-ups in their refrigerated truck for hot foods, produce, and non-perishables, and stated they will always accept and find a place for donated food, as they supply many other shelters in town.

Brother Benno's has a refrigerated truck and can do pick-ups for hot foods, produce, and non-perishables. They are looking for more fresh produce.

Brother Bennos
uplifting the dignity of those we serve

Jewish Family Service of San Diego does distribution through its Hand Up Food Pantry program, which feeds 120 families a month (one Sunday each month) with 3,000 pounds of food. These are supplemental groceries providing about a week's worth of food.

Interfaith Community Services will pick-up food every Monday and Thursday in their refrigerated truck (they travel from their base in Escondido to Oceanside to make pick-ups at Ralph's and Food For Less). They feed 40 families a day, and their needs include milk, eggs and produce. They also accept jackets, blankets and socks (but no other clothes as they don't have the storage space) for distribution to the homeless. They also stated they are in need of reusable bags to distribute food or help developing a program to influence those who receive food to bring their own. They get a lot of donations during the holidays but then they taper off after January 1st, which is when they need donations and volunteers the most.

San Diego Humane Society and SPCA

The San Diego Humane Society/SPCA in Oceanside will take dog and cat food, canned tuna (preferably in water), canned chicken, meat flavored baby food and other food and non-food items. A complete "wish list" is attached in the appendices, and also online, where it is updated quarterly.

Inspired by her sister Camille's documentary, "One in Seven, The New Face of Hunger," Carlsbad student Gabrielle Posard created an initiative called ***"Donate Don't Dump"*** to spread awareness about hunger and food in North County. A decal with the "Donate Don't Dump" logo attached to windows of participating local businesses allows consumers to identify and support those that donate surplus food.

Contact information for Donate Don't Dump, as well as a list of food banks and shelters in Oceanside and the San Diego County Region is included in the Appendices.

Development of a Plan to connect generators of donatable food to local shelters and food banks is recommended to maximize diversion. Tips from Cal Recycle on how the City can help promote

food banking are included in Appendix L, as is how to allay liability concerns and the complete text of the Bill Emerson Good Samaritan Act. All of the above information should be added as key resources on the City's website.

Other Support for Reuse

Other major opportunities for supporting reuse include:

Reuse Collaborative - Help form a reuse collaborative with businesses and nonprofits throughout the region to help in marketing products collected through various reuse networks, and to help develop an improved distribution system.

Promotion – Promote existing thrift stores, used building material stores, yard sales and flea markets and stores capturing surplus office supplies, clothing, furniture, books and building materials to actively promote local antique and thrift stores, yard sales and flea markets, repair shops (e.g. appliances, autos, furniture) and local electronic equipment, furniture and appliance resellers. Develop a guide to these locations and post on the City's website and arrange for it to be published in the local newspaper as a special insert for Earth Day, Green Week or America Recycles Day. Feature programs (reuse fashion shows, repair days, swap and shop downtown) throughout the year to encourage Oceanside to reuse and shop locally.

Reuse Warehouse - The City should consider providing a central warehouse for the accumulation of discards for reuse and recycling, if unused City facilities become available. A central warehouse could serve as a transfer point for products collected by WM. Local reuse stores could be allowed to pick through the loads before the residues are sent to a landfill. Initially, a pilot program could be done outside the rainy season at some open land (such as El Corazon or the City Operations Center) to gauge the interest of reuse stores in working in this manner and to work out terms and schedules. This would be particularly effective if equipment is available to move bulky goods off trucks and into transfer trailers..

Ideally, an empty warehouse would be the best location to do this year-round. The City and WM should work with a reuse collaborative to develop a reuse warehouse to help sort and store products, and absorb the ebb and flow of products that are collected prior to distribution. The extent of the warehousing needs depends on how many players get involved in the reuse and recycling of products. Space could be leased out on a spot basis as needed to help in the ups and downs of market conditions. Examples of this being done successfully include the food recovery operations discussed above, and major warehouses operated by Goodwill and ReStores of Habitat for Humanity.

Expand Retail Network - Oceanside should work with major retailers of clothing in the area to establish "Bargain Basement" sections in their stores where premium used clothes supplied by existing thrift stores could be sold, with the profits from sales split between them. This would provide an expanded way for major retailers to highlight their green attributes and sensitivity to

the current economy, and forge new partnerships that provide greater social equity through support of local job-creating thrift businesses and nonprofits.

Oceanside could pursue a similar concept with other reusable products that are discarded. Used lumber, building materials and compost products could be marketed through major home repair, hardware stores and nurseries in the region. Used furniture could be marketed through furniture stores and used appliances could be marketed through appliance stores. An entire network of repair and refurbishing businesses or nonprofits could be established to upgrade materials and products that are collected through large-scale reuse programs to attain a higher price from such coordinated, cooperative retail activities.

Electronic Matching Services - Electronic product and material matching services (e.g., FreeCycle, Craig's List, eBay and other product and material exchanges) should be promoted, and a service like LA Shares could be supported by Oceanside. LA Shares electronically matches surplus furniture, supplies and equipment from businesses in area to needs of schools and non-profit organizations.

Returnable Shipping Containers - Use of returnable shipping containers and pallets by local businesses should be encouraged. The City should organize a workshop on this topic and related practices in collaboration with other communities in the area.

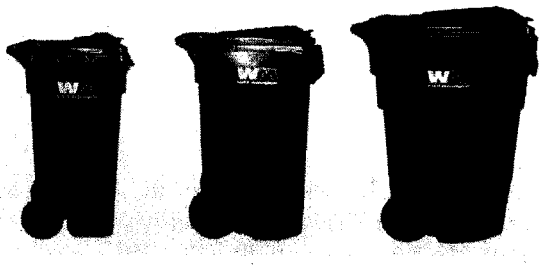
Adaptive Reuse - Oceanside should work with historic preservation advocates to restore and reuse buildings, rather than demolish them. Adoption of "adaptive reuse" as a priority in City building standards for residential and commercial construction should be considered, and the demolition of any building that is still functional should be discouraged.

Bulky Items - The City has already included a policy of maximum reuse and recycling of bulky items in its new contract with WM. The contract indicates WM shall dispose of bulky items according to the following hierarchy:

- Reuse as is (where energy efficiency is not compromised)
- Disassemble for reuse or recycling
- Recycle
- Disposal

WM is not allowed to landfill bulky items unless they cannot be reused or recycled.[58] This provides for the highest and best use of the products. The City should adopt a goal for WM to reuse and recycle at least 75% of all products collected in the bulky item pickup.

4c. Recycling



Residential Recycling

Oceanside recently changed from manual residential collection to a new automated trash and recycling collection system. The

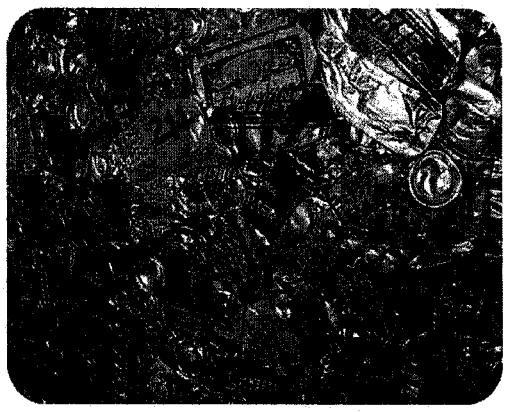
[58] Section 4.05.5, Oceanside Solid Waste Services Contract with Waste Management of California, 2010.

new system makes recycling easier and provides larger carts that roll to the curb. The City negotiated a discount for smaller garbage carts to incentivize recycling, and reward those who are generating less waste. As residents become more familiar with the new recycling services and services have expanded to a more comprehensive organics recycling program (food materials in green cart), the amount of that discount should be increased over time. Ideally, garbage rates should be adjusted once a more comprehensive organics program is implemented, that includes at a minimum, vegetative food scraps. The City could develop linear Pay-As-You-Throw rates to provide a greater incentive for Zero Waste over time, if more waste diversion is desired. Rates could be charged the same for each 35 gallons of garbage collection service.

Oceanside mandates recycling at apartments.[59] With the new support of the state mandate that all apartment buildings over five units must recycle, the City could strengthen its existing recycling ordinance to ensure apartments comply. Oceanside should also ask Camp Pendleton to join in the expansion of their recycling programs so that personnel that live on or off base are educated how to participate in the same way.

Commercial Recycling & AB341 State Mandate

Over 70% of the materials still being discarded in landfills or incinerators in the state are from the commercial sector, including commercial, industrial, construction and demolition, and multifamily residences. AB 341 was signed into law in 2011 and establishes a requirement that all major businesses and multifamily dwellings recycle. Communities are required to implement education, outreach, and monitoring programs to inform businesses of the state requirement to recycle and how they can recycle in the jurisdiction. Communities must identify and notify targeted businesses that are not recycling and inform them about the state law and the various ways that they could recycle.



Communities must determine which businesses are subject to this law, based upon the level of service to which the business subscribes. Businesses that subscribe for over 4 cubic yards of solid waste per week and multi-family dwellings with 5 units or more are subject to this law. Cities are also required to monitor participation and compliance from local businesses, and report back to the State on that compliance. The reported information should include a description of activities implemented, how many and/or which types of businesses were contacted, how the jurisdiction tracked businesses that are not currently recycling and how they were informed of the recycling requirement. Jurisdictions will be required to report in the Electronic Annual Report starting with the 2012 report (due August 2013) on how they are implementing education, outreach, and monitoring activities.[60] Local governments are authorized to adopt additional clarifications of how businesses are expected to participate depending on the local systems in place.

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[59] Oceanside City Code Sec. 13.16(h).

[60] Source: Frequently Asked Questions for Jurisdictions about AB341 at: http://www.calrecycle.ca.gov/climate/recycling/faq.htm#Jurisdiction

Oceanside adopted a Mandatory Recycling Ordinance (MRO) in the early 1990s as part of a countywide effort to increase recycling. Consistent with AB 341, the City should revise its MRO to clarify HOW all Oceanside commercial waste should be separated at the source to keep recyclables and compostables separate from other discarded materials. The City ordinance should no longer allow commercial wastes to go directly to landfill or incineration without source separation. A sample of Commercial Recycling Ordinance changes is included in Appendix F.

The City should focus on education and technical assistance first, then enforcement and reinforcement for larger generators beginning in the second year of the program. Rather than focusing on fines, enforcement should start with warning notices from WM (no more than two warnings), then notices from them that service may stop and/or fines be imposed. It would be at the discretion of the City whether or not to impose a fine.

The City should place recycling containers at all public facilities wherever trash containers are located, to lead by example and support the local tourism industry. Locations should be phased in as soon as possible, starting with the highest use coastal areas and including all public parks, shopping malls, and transportation depots. As the WM contract only allows 25 added cans/services a year for trash or recycling this may need to be phased in over time. Alternatively, the City could ask WM to increase this number as part of WM's contribution to getting Zero Waste moving faster in Oceanside.

Recycling of yard trimmings from commercial businesses and multifamily dwellings should also be required. All non-residential and multifamily waste generators should recycle their yard trimming or otherwise prevent them from being disposed in landfills or incinerators. Oceanside should also ask Camp Pendleton to join in the expansion of their recycling programs so that personnel that live off base are educated on how to participate in the same way as on base.

Construction & Demolition Recycling

Three discard streams make up the construction and demolition debris category: construction discards, demolition discards and deconstruction, and recovery of building materials for reuse. Construction and demolition debris includes lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or yard trimmings discarded from construction, remodeling or demolition projects. These materials can take up substantial amounts of space in a landfill, yet they are relatively easy to recycle and reuse if the proper infrastructure is established. A strong demand exists for used lumber, fixtures, frames, doors and molding as well other building materials in usable condition. While treated wood represents a challenge due to its toxicity and limited options for recycling or composting, it is a durable, long-lasting material that can be reused provided proper deconstruction efforts are made.

"Oceanside has done a great job in developing a public/private partnership with Moody's to provide construction and demolition debris recycling services."

Oceanside has done a great job in developing a public/private partnership with Moody's to provide construction and demolition debris recycling services. However, a lot of construction and demolition materials are still thrown away.

As part of its implementation of AB 341, the City should adopt a construction and demolition debris ordinance that requires all construction and demolition projects to meet diversion goals. This will be particularly important when more construction, remodeling and demolition work takes place in the future.

The construction and demolition ordinance should require deposits and plans on how to achieve the specified waste diversion goals, as well as incentives to firms that deconstruct buildings and reuse materials. Plans should be required on how to meet a 50% recycling goal initially, then gradually increased to the new state goal of 75% diversion. Deposits should be required and returned when the project is over and this target has been met.

Deconstruction and recycling of construction and demolition materials should be required for all building and take down permits. Deconstruction provides the highest valuable materials in the discard stream as materials can be reused as originally intended (a door removed from a building, for example, can be reused as a door in the construction of another building). Further, deconstruction is an invaluable training tool for workers and small businesses which leads to higher skill levels that can be translated to all construction trades and higher income for an expanded tax base.

Green building programs should distinguish between construction and demolition materials recycling and recovery of used building materials from deconstruction. Those programs should provide additional incentives for deconstruction, such as crediting reuse by the value of materials discarded, or a multiple of tons recycled (e.g., 2-3 times the value of recycled tons).

A sample construction and demolition ordinance is included as Appendix G.

Recycling Facilities

WM has started to implement a new single-stream recycling program under a new contract with the City. Initially, WM will ship materials collected in Oceanside via transfer trucks to Allan Company in San Diego. WM is constructing a new single-stream MRF in Orange County and will process Oceanside's recyclables there once that facility is operating. As a result, most of the recycling processing capabilities needed for Oceanside exist or are handled adequately under existing City contracts.

Market Development

Critical to the success of Zero Waste in the future will be a greater emphasis on the use of discarded materials, products and packaging in the local economy, or at least within the United States. Over 80% of all materials recycled in California are currently shipped overseas, with U.S. consumers purchasing the value-added products made from these resources. As the majority of jobs in recycling are in the manufacturing of new products, we're operating similar in fashion to an undeveloped country and exporting a huge potential for jobs that could be retained in our own.

In California, a network of Recycling Market Development Zones (RMDZs) was established to foster the development of local recycled product manufacturers. In San Diego County offices there is a RMDZ dedicated to North County. The zone includes the cities of Carlsbad, Del Mar,

Escondido, Oceanside, Poway, San Diego, San Marcos, Solana Beach, Vista, and Unincorporated County of San Diego.[61] There were four RMDZ loans made in this area since 1990 for a total of $1,773,250. Two of those loans are still active, totaling $1,501,250.

Table 8 - Recycling Market Development Loans in Oceanside

Business Name	Contact	Fiscal Year	Loan Amount
ARNA Trading Inc. (Simba International)	Ash Shah	2005-2006	$101,250
Oceanside Glasstile Company	Miles Bradley	2000-2001	$1,400,000
Oceanside Glasstile Company	Miles Bradley	1994-1995	$76,000

One of the major successes was Oceanside Glasstile,[62] which received two loans from the RMDZ. The company was founded in 1992, and creates handcrafted luxury glass tile using recycled bottle glass. They are a great example of how entrepreneurs can develop niche markets for high value-added products, and create jobs. **Glasstile employs over 40 people.** The material the company produces is made from silica sand and can have as much as 86% recycled content, including over two million pounds each year of glass from curbside recycling programs. They also incorporate glass trimmed in their process back into the mix. Glasstile is an exceptionally strong building material that is impervious to water and heat and thaw resistant, which gives it a long-lasting durability that adds to its sustainability.

Simba International has been a plastic resin distributor and recycling company in Oceanside for over 15 years. They initially focused on recycling post industrial and commercial plastic scrap, and then diversified in 2006 into metal (copper, brass, aluminum and steel) and paper (cardboard and newspaper). They offer toll grinding (regrinding larger pieces of plastics into granulated flake) services to plastics companies for most types of plastics and service industrial, commercial and residential communities. They also provide destruction services for obsolete and expired products, aged inventory, and discontinued items.[63]

A new coalition of market development interests was established this year: the Recycling BIN Coalition to "Build Infrastructure Now." They are working with CalRecycle to ensure that future expansion of collection programs under AB 341 include a major emphasis on the use of those products in California. Oceanside should join the Recycling BIN Coalition and lend its support to the development of innovative businesses locally to reinvest resources and cash back into the local economy and create good green-collar jobs. Oceanside should also ask Camp Pendleton to join in that coalition to support these efforts.

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[61] Source:
http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile4.asp?RG=C&JURID=346&JUR=Oceanside
[62] See www.glasstile.com
[63] See www.simbaint.com/

Resource Recovery Park

A Resource Recovery Park is a location where reuse, recycling and composting businesses co-locate to gain added efficiencies in operating, marketing and serving the public.[64] Resource Recovery Parks are naturally evolving at many landfills, transfer stations and material recovery facilities in California. Instead of just evolving, the concept of Resource Recovery Parks is to actually *plan* for them to happen. Price incentives should be designed in by how rates and fees are set. The proper flow of materials is also critical to encourage users to stratify their loads to drop reusables and recyclables off first, then compostables and construction and demolition (which may require some tip fee to cover their costs), and then to dump any little amount of trash that they couldn't figure out how to sort out, last (with the highest costs for dumping that). Resource Recovery Parks are designed to accept all 12 market categories of reusables, recyclables and compostables from the public.

A Resource Recovery Park in Oceanside could be easily accomplished at El Corazon. Agri Service and Moody's are already located there. A perfect complement to them would be the addition of a reuse operation for used building materials. That could be done outside in the area where Moody's is located. In addition, three cubic yard or roll-off bins for other reusable and recyclable materials could be added in a small area to accept the full 12 market categories.

A reuse warehouse would also help transform El Corazon into a Resource Recovery Park, at least until Moody's leaves the site. A reuse warehouse could aggregate, segregate and distribute reusable products at wholesale prices to supply reuse stores throughout the region. An El Corazon Resource Recovery Park could also include retail sales of used building materials, used furniture and appliances, compost products and a free swap program for appropriate household hazardous wastes (e.g. paint and garden supplies) and reusable products. The Resource Recovery Park could also donate products to local schools and nonprofits.

Once El Corazon's Master Plan for development is implemented, an alternate location for these activities could be found within Oceanside or nearby. Possibilities include City lands, areas zoned as heavy industrial and/or warehouses that could be converted to house some of the services. These could also be considered for siting the Resource Recovery Park at the outset if the El Corazon approach proposed above is not adopted. Alternatively, in an area as compact as Oceanside, having multiple facilities in multiple locations as is currently the situation may suffice. As most of the processing capabilities have been identified for the near-term, the

[64] See Resource Recovery Park case study written by Gary Liss & Associates at: http://www.calrecycle.ca.gov/Publications/LocalAsst/31001011.doc

desirability of this approach can be pursued over time if there is interest in the City and/or the region.

4d. Composting

El Corazon Compost Facility

Organic discards management should begin with intensive source reduction and reuse measures, including food banks. Source reduction and reuse measures should be fully planned, developed, adequately funded, implemented and fine-tuned to eliminate wasting these valuable products. The majority of edible food should be captured first for people then livestock. A majority of the more difficult to handle compostables can be diverted from landfilling through such source reduction and food bank programs. Once all this is done to reduce and reuse organics, the remaining organic materials should be composted or digested.

Hierarchy of Options for Food Scraps and Other Compostables

The following hierarchy represents the most environmentally friendly, socially beneficial and highest and best uses of source reduction, collection, handling and processing for food scraps and other compostables.

Hierarchy of Options for Food Scraps& Other Compostables

- Source Reduction
- Donation to Food Banks
- Food to Animal Feed/Direct Land Application
- Subsidized Distribution of Compost Units and Intensive Training for Residents
- Shared, Small-scale, Decentralized Composting Systems for Residences and Businesses
- Use of Discarded Organics for Production of Liquid Fertilizers and other Beneficial, Value-added Products
- Combination/Comprehensive Programs
- Co-collection of Food Residuals with Yard Trimmings/Centralized Composting using In-vessel or Open Windrow Technologies
- Single Stream Collection/Drop-off of Food Residuals for Decentralized or Centralized Composting

Organics Facilities (For Yard Trimmings, Manure, and Food Scraps)

Decentralized Composting Options

Decentralized options such as home and onsite composting for the commercial sector and shared sites at community gardens or strategic business clusters should be developed. Decentralized options, such as shared small-scale in-vessel systems and backyard digestion units can also serve to divert a substantial percentage of this material.

The City of Oceanside has an excellent home composting and sustainable landscaping/gardening program through its partnership with ASI's El Corazon Compost Facility. As part of its

contractual agreement with Oceanside, ASI provides finished product to the City, conducts compost and mulch giveaways, sells worm bins (for "vermicomposting") at a reduced (subsidized) rate and provides educational programs to Oceanside residents. Existing efforts should continue and complementary/expanded programs could include subsidized backyard digestion bins that would allow residents to divert all food scraps, including meat and fish, from the landfill.

Backyard Composting - A well thought out, adequately funded program could result in substantial diversion of food scraps and yard trimmings. The North Shore Recycling Program, a tri-municipal agency of three Vancouver jurisdictions conducted a yearlong study to evaluate this potential. They determined that 37% of discards sent for disposal from single-family homes could be composted at home (including low-quality household papers like napkins and egg cartons).

"Over the past five years, the North Shore Recycling Program has invested approximately $16,100 in bin subsidies, and backyard composting has resulted in avoided tipping fees of approximately $3.5 million."

At 2011 rates, it's estimated that each study household saves the municipality $35.44 in tipping fees annually, and extrapolated total avoided tipping fee costs for the North Shore's population of composting households totals $874,227 a year.

Over the past five years, the North Shore Recycling Program has invested approximately $16,100 in bin subsidies, and backyard composting has resulted in **avoided tipping fees of approximately $3.5 million**.

The North Shore does not currently include backyard composting in its municipal diversion rate calculation of 59.5 percent (2010), but when composting is factored in using the measurements obtained in the study, the North Shore's diversion rate is actually 67.2 percent.

With training and outreach, the study estimated that 1,146 pounds per household per year could be diverted from the landfill through backyard composting. Assuming an estimated generation rate of 4,464 pounds of refuse per household, home composting represents potential diversion of more than 25%[65].

Master Composters - A Master Composter program would provide the City with dozens of volunteers that could help implement home composting training, source reduction outreach to businesses, and food bank efforts. These volunteers could also help with establishment of community gardens or expansion and management of existing ones.

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[65] http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm

Community Gardens - Community gardens are an excellent venue for developing composting demonstration sites, sharing composting bins, conducting home composting classes and distribution of subsidized home composting bins. They are also excellent opportunities for exhibiting the connection between sound organic resource management, soil fertility, water conservation, decreased water pollution, nutrition and healthy food. Depending on the size and location of the garden, the site may also offer the opportunity to manage some of the food scraps from local businesses in a shared, small-scale in-vessel system.

Gardens at schools often are used to teach how nature closes the loop as part of science education programs[66], with kitchen food scraps composted on site to feed plants that are prepared for school lunches. As many school lunches are now prepared off-site, these type of school programs could be done with the food grown going home with those who raised it, or those who most need it, or those who win it (through some type of drawing).

Based on these many benefits, the City should implement a compost bin at each community garden and farmers markets where there is enough room and interest from the users of those operations to properly maintain it. All schools should implement Life Lab programs. The City could seek champions from each interested school to help develop these programs. The Oceanside Unified School District should adopt a policy and program to support these programs detailing any support available from the District, schools and the City.

Community gardening has also been a major component of Oceanside's nutrition program. The residents in Eastside - most of who come from agricultural backgrounds – were leaders in pursuing this. At the request of residents, the City purchased and cleared a large lot to make way for the Eastside Community Garden. The community garden provides a source of fresh vegetables for the gardeners and their families, serves as a starting point for nutrition education. No fees are charged for use of the plots.

With the success of the Eastside Community Garden, the City initiated a second community garden in Crown Heights. The City leased a vacant litter-filled lot for $1 a year. The Crown Heights garden needed very little advertising to get the community involved. Many residents from this neighborhood also had an agricultural background. They jumped at the opportunity to have a garden plot since their residences did not have adequate space for home gardening. A local resident group in

[66] Since 1979 the Life Lab Science Program has supported science and garden-based education through publications, professional development, and innovative programs in Santa Cruz, CA. See: http://www.lifelab.org/

Crown Heights, La Corona Limpieza, was responsible for clearing the plot of land for the community garden and for recruiting many of the gardeners.

Both the Eastside and Crown Heights gardens have 45 plots for gardening, all of which are currently planted.

Because of the tremendous response from the community and the growing waiting list for a gardening plot, the City is looking for new locations to expand or create new gardens. The City has also recognized that the community gardens have provided other benefits to the community They enhanced the aesthetics of the neighborhood, assisted in nutrition education, brought together the communities and provided a gathering place for residents to talk about what's going on in their communities.

As a result, North County Community Services is now also looking for opportunities to have community gardens at their child development centers. They are looking for ways to establish gardens at these sites to raise food for the nutrition program at the center (to promote healthy eating) and to introduce children to where food comes from.

Other existing gardens include the Ivey Ranch Park Association, which offers a 15x20 garden plot for $120/year (includes water and access to community storage sheds), and the Kelly Street Cooperative Garden, still in a start-up phase. Kelly Street will allow use of 10'x20' plots for a $15 sign-up fee and $10/month to share the cost of water. The Ivey Ranch Park gardeners raise food for personal use and distribute any excess to friends and donate some to the childcare program managed by the Association. There is also a small garden for seniors at El Corazon Senior Center that includes fruit trees that are trimmed to keep fruit within easy reach and raised beds.

Addresses and contact information for these gardens are included in the Appendix K.

Onsite composting for the commercial sector is a major opportunity. For every solid waste or recycling program, 80-90% of the costs are in the hauling of the materials from where they have been generated. If there is enough room on-site to locate a composter, the cost of purchasing such a unit could be paid back shortly from avoided hauling costs. Much advancement in small, in-vessel composters has occurred in the past few years. [67] Some of these units may be suitable for schools, larger businesses or business clusters. Haulers or composters could also provide a new service to lease composters and assist in managing them like they do for garbage and cardboard compactors.

Yard Waste Program

WM collects yard waste in green carts and delivers those materials to the ASI El Corazon composting facility. Residents may place lawn clippings, leaves, weeds, tree branches, shrubs, garden trimmings, sawdust and untreated wood in the green carts, as long as they are free of trash. El Corazon receives approximately 50,000 tons per year of organics. Another 8,000 tons of yard waste is still landfilled and could be recovered as more people become aware of the importance of this and the incentives the City has adopted.

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[67] A Food Scrap Management Technologies Vendor's List can be found on CalRecycle's website @ http://www1.calrecycle.ca.gov/Organics/Food/Compost/InVessel.htm

In addition to ASI, Evergreen Nursery is permitted for composting yard trimmings and stable bedding. It is permitted to handle up to 10,000 cubic yards of active compost material. The nursery sells a full line of soil and landscape materials, including soil amendments and mulches.

Food Scrap Diversion and Centralized Composting Opportunities

Over half of all remaining materials landfilled are compostable. Food scraps is the largest amount, constituting about 20% of all residential and commercial discarded materials.

While minimal infrastructure for centralized options to compost food scraps currently exists in the county, the El Corazon Compost Facility is in the process of modifying its permits to include food material.

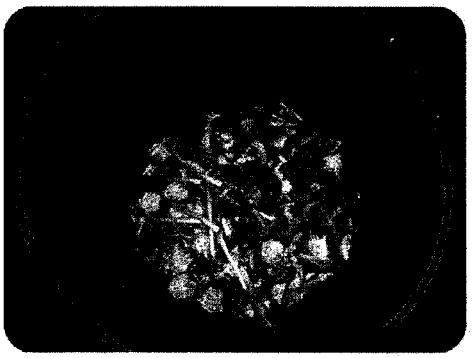
Options considered and discussed during the organics stakeholder meeting included:

- Accepting only vegetative food scraps (no meat or bones) and no food soiled paper in the existing yard trimmings bin
- Accepting all food scraps in the yard trimmings bin, and
- Collecting food scraps separately.

ASI representatives noted in interviews that vegetative trimmings have less vector, pathogen and odor issues than meat and dairy and would prefer that material to the entire stream.

The idea that ASI handle vegetative food scraps only for the next 15 years and then the City expand to compost all organics after that was raised. Another idea discussed was to consider doing pilot programs as a first step for both residential and commercial food scraps, broken down into tests on vegetative materials only as well as all organics, including meat and fish.

ASI noted that they would be agreeable to develop and implement pilot programs with Oceanside provided they are reimbursed for their costs.



WM would like to see the potential of organics being used as an alternative fuel and energy source explored as the technology comes online. WM locally currently only operates a research and development facility in Orange, CA. The company plans to take what is learned from this Orange facility as well as from several other technologies it is concurrently testing across the United States. While plans have not been finalized, a WM representative stated to Zero Waste Associates, "there is a good chance that another facility could become available closer to Oceanside."

As ASI's new permit will allow them to accept food scraps, this ZW Plan recommends allowing residents and businesses to commingle vegetative food scraps with yard trimmings as soon as the details are worked out. After it implements a vegetative food scraps program, Oceanside could consider developing a pilot program to explore how best to accept meat, fish and soiled paper in future programs, if greater diversion is desired. Such analysis should be done before 2020 so the

City could determine how it wants to handle this issue in the next solid waste and recycling contract in 2023.

There are 12,195 tons of residential food scraps from Oceanside generated annually.[68] Assuming a 25-30% participation rate from residents (based on Alameda County participation rate for residential food scrap co-collection with yard trimmings), 3,049 to 3,659 TPY, or 9.77 to 11.73 TPD would be collected (based on collection six days/week, 1x/week per household). Assuming a 70% participation rate (based on Toronto participation rate percentage after implementing 1x/week food scrap collection and every other week collection of refuse), 8,537 TPY or 27 TPD would be collected.

An additional 12,162 tons of commercial food scraps are generated in Oceanside.[69] If 80% were captured[70], then 9,730 TPY or 31 TPD would be collected. The City of San Diego has implemented a pilot program for commercial that can accept meat and fish, paper towels, napkins and soiled paper, but not paper plates or cups. San Diego reports that they have virtually eliminated all contamination from received material.

Currently only one composting facility in the County of San Diego, the City of San Diego's Miramar Greenery, accepts food scraps. ASI's El Corazon Compost Facility is in the process of relocating and permitting a 23-acre parcel of land about 1/2 mile southwest of its current location. ASI is currently under contract to receive and process all of Oceanside's yard trimmings. Material from outside the City is also accepted. The relocated facility would accept agricultural material, food material and green material.[71]

"Residents and business representatives expressed interest in collection and processing of food scraps during the stakeholder meeting held on November 17, 2011."

Per ASI's Initial Study, the facility would receive a maximum of 500 tons per day of all materials, and liquid waste not to exceed 75 tons per day. "The total site capacity (at any given time) would be 50,000 yards, which includes incoming material, active compost and finished

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[68] http://www.calrecycle.ca.gov/profiles/Juris/JurProfile1.asp?RG=C&JURID=346&JUR=Oceanside

[69] http://www.calrecycle.ca.gov/profiles/Juris/JurProfile1.asp?RG=C&JURID=346&JUR=Oceanside

[70] Estimated participation and capture rate based on studies done for Los Angeles Zero Waste Plan

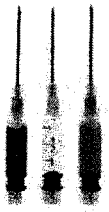
[71] As defined in CCR Title 14 Section 17852:
(5) "Agricultural Material" means material of plant or animal origin, which result from the production and processing of farm, ranch, agricultural, horticultural, aquacultural, silvicultural, floricultural, vermicultural, or viticultural products, including manures, orchard and vineyard prunings, and crop residues.
(20) "Food Material" means any material that was acquired for animal or human consumption, is separated from the municipal solid waste stream, and that does not meet the definition of "agricultural material." Food material may include material from food facilities as defined in Health and Safety Code section 113785, grocery stores, institutional cafeterias (such as, prisons, schools and hospitals) or residential food scrap collection.
(21) "Green Material" means any plant material that is separated at the point of generation, contains no greater than 1.0 percent of physical contaminants by weight, and meets the requirements of section 17868.5. Green material includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.

product. At peak capacity the facility would be capable of processing 80,000 tons (200,000 cubic yards) of material annually." An aerated static pile (ASP) system would be utilized to process received material. Active substrate may or may not be covered with a "bio filter or perforated covers."

From a generation volume and character (total food scraps generated, captured, and available for processing plus available bulking agent), permitting and processing perspective, El Corazon's proposed relocated facility has the potential to handle all of the City of Oceanside's residential and commercial food scraps.

4e. Special Discards Handling (Including Bulky Items)

Special discards include construction and demolition debris and regulated/hazardous materials. Regulated and hazardous materials are mostly products and packaging that have been introduced into the marketplace since the inception of the modern system of waste management and recycling. These are increasingly complex products and many have toxic elements associated with them that are illegal to dispose of in MSW landfills or down the drain. Although these materials represent a small percentage of the waste stream, they are very costly for the City to dispose of properly, and oftentimes they are just dumped illegally.



As the system is broken, some creative approaches are suggested on how to address these regulated and hazardous materials. Although diversion or phase-out of these materials is not required to meet the 75% goal, elimination of these hazardous or hard-to-handle discards as soon as possible would help reduce impacts on the environment, and save the City and County significant costs for household hazardous waste management.

Although construction and demolition debris is a small amount of the current waste stream, the City should develop policies and programs now to prepare for increased activity in the future.

Construction and demolition projects should require deposits and plans on how to achieve specified waste diversion goals, as well as incentives to firms that deconstruct buildings and reuse materials. Plans should be required on how to meet a 50% recycling goal initially, then gradually increased to the new state goal of 75% diversion. Deposits should be required and returned when the project is over and this target has been met. Moody's is a great asset in Oceanside that will help support this program.

Regulated and hazardous materials handling include chemicals and other hazardous waste, tires and non-recyclable materials that need to be redesigned because they are not recyclable or compostable (for example, baby diapers and treated wood).

Tires can be basic ingredients for road base and surfaces and should be sorted for that use. Chemicals are not allowed in the landfill and should be handled at hazardous waste facilities, such as the Waste Management Center. Non-recyclable materials like diapers and treated wood that is not reusable as lumber is currently landfilled. A dialog should be initiated with industry representatives about product redesign or product bans.

Take-back ordinances should be passed for items that cannot be reused, recycled or composted. In initial developmental phases of this process, sharps and pharmaceuticals should go back to pharmacists, and fluorescent lights and mercury batteries back to retailers.

As disposable diapers are over 5% of Oceanside's current discards[72], or more than 6,000 tons in 2010, they should be an early priority for addressing regulated materials. In a house with a child in diapers, disposables make up 50% of that home's discards. With collection and disposal costs at around $100-$150 per ton, Oceanside currently spends between $450,000 and $675,000 annually handling disposable diapers. And as disposable diapers won't decompose for at least 250-500 years, landfill maintenance costs will continue to accrue on these items well into the future. One option is 100% reusable cloth diapers, which are currently used by between 5 and 15% of diaper changes. There are a number of methods for encouraging reusable cloth diaper use as part of overall source reduction efforts:

- Educational and Technical Assistance Programs - Studies have shown that in-person introductions to cloth diapering are most successful early in pregnancy.
- Reusable Cloth Diaper Incentives - While cloth diapers will cost less for families in the long term, there is the initial investment, which can be an obstacle.
- Reduce Institutional Disposable Diaper Use – This can be accomplished by working with Tri-City Medical Center, local daycare providers, and elder care homes to encourage the use of reusable cloth diapers in their facilities.
- Cloth Diaper Business Support - Incentives can be provided for local businesses making and selling reusable cloth diapers.
- Disposable Diaper Reduction/ Extended Producer Responsibility - Require retailers to take back disposable diapers, as they are not recyclable or compostable in Oceanside. The Real Diaper Association - which is a national advocate for reusable diapers based in San Diego County - suggested this. A precedent was set, and a demonstration program the industry conducted with the City of Santa Clarita proved the feasibility of this approach.[73]

  The demonstration program proved the American public strongly supports diaper recycling, the process works, diaper recycling can be a cost-effective option for municipalities, and an active market exists for the recycled diaper materials. If that approach was combined with a partnership with local diaper services, and funding from producers using the Ontario, Canada EPR shared responsibility model for funding local government programs, this could be a major step forward for Oceanside. Such a project would be particularly attractive for the Real Diaper Association to work with the City to help implement this as a pilot or on a full-scale basis, depending on the response from industry.

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[72] In Los Angeles Zero Waste planning, Cascadia determined that diapers were 5% of discarded materials. Also, Sunnyvale in 2010 had 2536 tons of diaper waste (3.6% of 70444 total tons) See: http://sunnyvale.ca.gov/Portals/0/Sunnyvale/DPW/recycling/SV_ReportUpdate_FINALV3KG.pdf. Sunnyvale's number only focused on baby diapers, and not the growing amount of elderly diapers and diapers from health care facilities.

[73] In November 2002, Santa Clarita and the company "Knowaste" launched a nine-month demonstration program designed to test resident response to diaper recycling as well as the technical feasibility of collecting diapers separately, processing and recycling them. Santa Clarita's diaper recycling program received international acclaim from environmentalists, city leaders and solid waste professionals, setting a new environmental standard for California and the nation and clearly demonstrating the environmental and public health concerns with diapers in landfills. Source: http://www.knowaste.co.il/opp_recycl_us.html

Pay as You Throw Diaper Waste - As other Zero Waste plans remove recyclables and organics from the residual waste stream, the move to bi-weekly residential solid waste collection would become the norm. Weekly collection of residential solid waste should be offered on a subscription fee basis for the subset of residents continuing to use disposable diapers.

Reusable Hazardous Items, such as paint, should be made available for reuse or sold. Fees should be assessed at the retail level for discarded items requiring special handling for proper disposal. The regulated materials stream should be handled no differently than the recycling and reuse streams. The key is separate bins for specific commodities. Chemicals must be handled by hazmat-trained workers, and if possible, be made available for reuse.

Special Discards Facilities

Residents may bring up to 5 gallons per day of used motor oil, used oil filters, and anti-freeze, Tuesday through Saturday, from 8 a.m. to 4 p.m. to the Recycling Center of Waste Management without an appointment. In addition to conserving natural reserves, recycling used oil and oil filters protects human health and the environment. When used oil is poured on the ground or down the sink, streams, rivers, lakes, ocean, and groundwater are contaminated with many different toxins and heavy metals including arsenic, cadmium, chlorides, chlorinated compounds, chromium, and lead. It only takes one gallon of used oil to contaminate one million gallons of drinking water! Dumping used oil down drains or storm drains can have effects similar to those of an oil spill because used oil can stick to aquatic life, resulting in injury and even death.

The City of Oceanside, in partnership with the Solana Center for Environmental Innovation, hosts Used Oil Filter Exchange Events. During these events residents of Oceanside can bring their used oil filters and exchange them for a FREE new oil filter of their choice. Residents are eligible to receive up to three FREE oil filters, receiving one new oil filter for each used oil filter they recycle.

In addition, the following certified collection centers accept oil and oil filters from Oceanside residents[74]:

- AutoZones (2 stores)
- Ecology Auto Parts
- Jiffy Lube (2 stores)
- Midas
- Mossy Nissan Oceanside
- O'Reilly Autoparts (3 stores)
- Oceanside Tire & Service Center
- Pep Boys (2 stores)

Express Tire also is a certified collection center, but just for used oil.

Other HHW materials and/or universal waste are accepted twice a month on Saturdays by appointment at the WM Recycling Center. Acceptable items include fluorescent light tubes, antifreeze, paint, chemicals (pool and others), household cleaners, sharps and pesticides. The majority of medications are accepted as HHW. Batteries and used cell phones can be recycled

[74] This program is funded by a grant from the California Department of Resources Recycling and Recovery. Source: http://www.ci.oceanside.ca.us/gov/water/recycling/guidelines/oil.asp

curbside for free in the new WM system. Residents must put them in a zip lock baggie and place them on the lid of the recycling cart.

The County has two permanent collection facilities to accept HHW from Unincorporated County residents. The closest one to Oceanside is in Ramona, at the Ramona Disposal Transfer Station. As that is about 40 miles away from Oceanside, it is of very limited value to Oceanside residents or businesses.

"The best way for many of these HHW to be handled will be through take-back programs of retailers and producers..."

Many HHW materials cannot be recycled and must be managed carefully to prevent threats to environmental and public health. These include batteries, light bulbs, pool and photo chemicals, household cleaners, paints, medicines, and needles. Reusable items (paints and chemicals[75]) should be transferred to the reuse services described above for sale or giveaway. Medicines should be taken back to pharmacies or donated to health care services that have pharmacists to oversee them (e.g., for children or underprivileged).[76]

The best way for many of these HHW to be handled will be through take-back programs of retailers and producers, as described above.

The largest special discards facilities challenge is for construction and demolition recycling after Moody's closes down in 2025. Although this may seem like a long way down the road to Zero Waste, Moody's is an incredibly valuable asset to the City and careful attention should be paid to how to keep it operating or to arrange for a suitable replacement.

If the City decides to plan for a replacement for Moody's, it could adopt a surcharge on construction and demolition recycling processing. As Moody's current prices for processing services are substantially less than any other options in the area, a surcharge would not impact the amount of materials processed at the site. This would provide the City with options down the road to Zero Waste.

The City's contract with WM does require the hauler to develop a plan to permit and construct a construction and demolition processing facility at a location within the City, upon request of the City. WM would need to propose a service rate that would be acceptable to the City. In the event options for Moody's do not work out, this would be another way for the City to proceed. If Oceanside chooses not to extend the term for Moody's operations in the City, then it should pursue this option under the WM contract no later than the end of 2020. For WM to site, design, obtain permits, build and begin operations of a facility, it would likely take at least three years and it could take a year or two more to finalize negotiations of terms for that additional service to be provided. Alternatively, by 2020 the City could decide to include this as another service option to be provided in a new solid waste and recycling contract in 2023.

A residual materials research center (see section on education) should be developed to research

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[75] See UV Irvine's program at http://www.ehs.uci.edu/apps/waste/chemrecycle/index.jsp

[76] See http://www.calpsc.org/products/pharma.html for examples of what others are doing regarding EPR and pharmaceuticals.

the potential end use or substitution for difficult to recycle and hazardous products. The first facility of this type in the world was opened in Torino, Italy last year. They have done a great job at identifying problem materials, and are working with manufacturers of those products and packaging to get them to explore alternatives.[77]

4f. Zero Waste Policies

Waste is a symptom of inefficiency and a system that is broken. Other communities have found that they can influence the marketplace to make it more economical to reduce, reuse and recycle through new policies and incentives. New policies refer to changing official policies, ordinances, plans, permits and purchasing procedures to reinforce the policy goal of Zero Waste. Incentives include different ways of structuring garbage rates and fees to make it more economical to reduce waste and reuse, recycle or compost more. A wide variety of new policies and incentives are detailed in the policies section of this ZW Plan that could harness the forces of the marketplace to help achieve Zero Waste goals. Other communities have found that this is the most effective and least costly way for them to achieve Zero Waste.

Once new policies and infrastructure to support those policies are in place, citywide education programs are needed to inform the public of the new policies and how to use the new system. The promotions for the new services that are starting up under the new contract with WM are a model of what should be done for new services in the future. This outreach should include all businesses, institutions, schools and colleges. Public buildings and parks should be the first to convert to new programs to lead by example for the public to understand what the City would like done.

Extended Producer Responsibility (EPR)

The focus of EPR policies in California has been to reduce the reliance and cost to local governments in providing household hazardous wastes (HHW) services. HHW services are an unfunded mandate placed on local governments by producers not taking responsibility for their products and packaging at the end of their useful life. The cost of the City's HHW programs is substantial, yet most of the HHW are still being buried illegally in landfills, poured down the drain, or otherwise being disposed of improperly.

Take-back programs like those for automobile batteries show that there is a better, more cost effective way to successfully capture HHW with much less government involvement. Over 95% of all automobile batteries are returned to the point of sale of new batteries, and are provided a significant economic incentive to do so (typically a $7-10/battery "core" fee deposit is refunded upon receipt of the old battery). In California, other examples of take-back programs already operating include those for beverage containers (the AB 2020 program), cell phones and rechargeable batteries.

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[77] Source: Rossano Ercolini, Presentation to CA Resource Recovery Association Conference session: *International Dialogues: Resource Recovery Parks in Other Countries,* August 2, 2011, San Diego, CA, ambientefuturo@interfree.it.

It is recommended Oceanside become a member of the California Product Stewardship Council and adopt an EPR Resolution. The California Product Stewardship Council is dedicated to shifting responsibility from ratepayers to producers to take responsibility for minimizing the environmental impact of products and packaging through all stages of the product's life. The adoption of an EPR resolution would be a critical step in declaring that Oceanside wants to start phasing out providing end-of-life product management services for free to the makers of toxic and disposable products. The latest sample resolution is included in Appendix P for Oceanside to consider adopting. An Oceanside EPR resolution should:

- Establish a preference for take-back provisions in purchasing contracts
- Call on state government to pass producer responsibility legislation

In addition, the EPR resolution could specify problem products to investigate for local actions, such as plastic bags and expanded polystyrene takeout food containers. Alternatively, the direction provided in the adoption of this ZW Plan could suffice for giving the latter direction.

Oceanside should also develop a list on the City website of businesses or nonprofits that will take back products and packaging from customers that are otherwise difficult to reuse, recycle or compost locally.

The City should also adopt an ordinance to require all retailers that sell items that must be collected as HHW to take those back to the store for proper reuse, recycling or composting. The City should also pioneer a new policy to require all disposable diapers to either have a deposit to cover the cost of proper disposal, or to require retailers that sell them to take them back through a retailer and/or manufacturer sponsored collection program.

"There was particularly a lot of support in the public meetings for Oceanside to adopt an ordinance to reduce the use of single-use shopping bags and to phase out the use of expanded polystyrene food takeout containers."

Oceanside should also join other local communities in the area and Camp Pendleton to adopt local take-back policies and programs for problematic materials such as plastic bags, food take out containers, batteries, fluorescent light bulbs and universal wastes. A sample fact sheet on fluorescent light bulbs from the CPSC is included as Appendix R to highlight the best practices that are recommended to follow for these products.

There was particularly a lot of support in the public meetings for Oceanside to adopt an ordinance to reduce the use of single-use shopping bags and to phase out the use of expanded polystyrene food takeout containers. The greater San Diego region uses more than 1.7 billion plastic bags each year, including over 180,000 plastic bags used in Oceanside.[78] According to the U.S. Environmental Protection Agency, less than five percent of plastic bags are actually recycled, and they are made from non-renewable fossil fuels. Even though paper bags are easily recycled in curbside programs, the use of reusable bags is far more efficient and sustainable than the use of any single-use bag.

[78] Source: http://www.ci.oceanside.ca.us/gov/water/recycling/green/dwab.asp

All large grocery stores are supportive of a consistent plastic bag ban. The California Grocers Association strongly supported the statewide plastic bag ban AB1998, which was defeated last year. Until there is a state law, they would like to see more consistency in plastic bag ban ordinances being adopted all over the state so they do not have to employ separate procedures for each jurisdiction.[79] During the ZW Plan public meeting, Albertsons spoke in favor of the City of Oceanside adopting the model ordinance developed by Los Angeles County, which can be found in Appendix Q modified for Oceanside's adoption.

However, there is organized opposition by the Save the Plastic Bag Coalition and the American Chemistry Council. They have sued a number of communities that have enacted or proposed to enact such ordinances. A key issue raised was whether such an ordinance requires an Environmental Impact Report (EIR) in each community before adoption. Marin County adopted an ordinance under a categorical exemption (with no EIR) and was sued by the Save the Plastic Bag Coalition. Santa Clara County adopted an ordinance with a negative declaration (and no EIR) and was not sued. Since a recent victory in Manhattan Beach, many California cities are moving forward with "second generation" plastic bag ordinances like the Los Angeles County model ordinance.[80] That ordinance bans plastic bags and imposes a 10-cent charge on paper bags to encourage the primary focus on reusable bags.

Locally, Solana Beach is working on developing a plastic bag ban as well.[81] Oceanside should collaborate with Solana Beach to propose an ordinance that is consistent for both communities, to minimize any confusion from a variety of approaches being adopted locally.

Green Building Requirements

The following recommendations should be coordinated with existing Oceanside green building efforts:

- The City should adopt a construction and demolition recycling ordinance. This would require contractors of projects over a certain threshold to recycle a targeted amount of material for all construction and demolition projects. This type of ordinance has been adopted all over California and resulted in dramatic increases in recycling with a minimum of public investment in recycling facilities. The construction and demolition ordinance should require deposits and plans on how to achieve the specified waste diversion goals, as well as incentives to firms that deconstruct buildings and reuse materials. Plans should be required on how to meet a 50% recycling goal initially, then gradually increased to the new state goal of 75% diversion. Deposits should be required and returned when the project is over and this target has been met.

- The City should advertise training locally for contractors, architects, engineers and developers on what is required by the new State Green Building Code that took effect January 1, 2011.

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[79] Glendale Zero Waste Plan, December 2011, page 17.
[80] Source: http://plasticbaglaws.org/get-involved/plastic-bag-facts/a-short-history-of-plastic-bag-laws-in-california/
[81] Source: Jacy Bolden at Oceanside Zero Waste Public Meeting on November 17, 2011.

- Oceanside should provide incentives for green buildings such as authorizing them to "go to the head of the line" in City permitting procedures.

- The City should provide a preference in leasing buildings to lease space from green buildings.

- Oceanside should adopt a green building policy to guide its use of green buildings and the construction of all new buildings in Oceanside. Such policy should provide incentives for use of products that are more durable, have a longer lifespan, require no additional finishing on-site, have less frequent maintenance and repair cycles, and give credits for products made from recycled content. Sample policy is included in Appendix B.

- The City should include a reuse goal in its green building policy to value the recovered products by the price for which they are sold, or some multiple of their weight, to reflect the higher value of reuse.

Environmentally Preferable Purchasing Policy

With a goal of Zero Waste, the City should revise its purchasing ordinance and procedures to comprehensively use recycled-content and reusable products, and expand the use of other environmentally preferable products and services. This will harness the City's buying power to support other "green" products and services.

The California Department of General Services and the US Environmental Protection Agency both have websites that can be used to help identify and evaluate green specifications, policies and vendors.[82] Specific products that may be purchased through state contracts include appliances, building and maintenance products, cleaning supplies, electronics, food services, grounds maintenance, office equipment, office supplies, and paper, safety and transportation products.[83]

Such environmentally preferable products have a lesser impact on human health and the environment when compared with competing products' raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation and/or disposal. The Water Utilities Department is leading the way for these policies in Oceanside.

The overall costs for these products should be monitored and reported on a publicly accessible website. The program should be evaluated financially as a whole, as some products may cost more and some products may cost less. A significant variety of recycled content "green" office supplies are now offered at competitive prices. Some examples of environmentally preferable products that save money include:[84]

- **Remanufactured Toner and Ink Cartridges** - Costs **30-60% less** per copy than "virgin" cartridges. King County, WA saved $250,000 by buying 3,400 remanufactured toner cartridges for $165,000 and returning emptied cartridges to their vendor.

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[82] www.buygreen.dgs.ca.gov and http://www.epa.gov/epp/. For assistance, contact DGS at: buygreen@dgs.ca.gov.
[83] Source: http://www.dgs.ca.gov/buyinggreen/Home/BuyersMain.aspx
[84] Source: http://www.calpsc.org/assets/projects/SanGabriel/2011-02-02_EPP-Examples-Tips-Resources.pdf

- **Recycled Paint** - Costs up to **50% less** than virgin paint and performs to Master Painters Institute standards. There are two suppliers in California – both "GS 43 Certified" (the Green Seal Standard for Recycled Content Latex Paint).
- **Re-refined Motor Oil** - Costs **25% less** than comparable virgin motor oil. The City is currently using re-refined oil in all bulk dispensers and has been for many years. The only bulk that is not re-refined is to meet manufacturer specific requirements such as for Allison transmissions.
- **Rechargeable Batteries** - Reduces replacement and disposal costs associated with single-use batteries. Can be "re-charged" up to 1,000 times.

The following recommendations should be coordinated with the purchasing department to finalize specific language for changes in the purchasing ordinance and/or City policies and procedures. (A draft policy is included in Appendix C)

"Oceanside should encourage waste prevention, recycling, market development and use of recycled/recyclable materials through lease agreements, contractual relationships and purchasing practices with vendors, contractors, businesses and other governmental agencies."

Oceanside should encourage waste prevention, recycling, market development and use of recycled/recyclable materials through lease agreements, contractual relationships and purchasing practices with vendors, contractors, businesses and other governmental agencies. It should adopt waste prevention, recycling and use of recycled supplies and materials as a City purchasing priority.

The City should generate less waste material by reviewing how supplies, materials and equipment are manufactured, purchased, packaged, delivered, used, and disposed. All purchasing agents within the City should submit an environmentally preferable products review sheet to the Solid Waste and Recycling Division prior to major purchases or major contracting for design and construction services (except for emergency purchases which are exempt)..

Oceanside should add a process to apply environmentally preferable products policies and the Precautionary Principle to all major City purchases and design and construction contracts. Solid Waste and Recycling Division should meet with each City department to identify products and services that may either be wasteful or toxic, and explore alternatives to current practices, or how to design the waste out (e.g., using native plant species for landscaping rather than using more pesticides to protect species not well suited to this ecosystem). The City should build on the experience of other cities where this has been done.

Oceanside should establish a website that lists all green, recycled, reusable, recyclable and compost products and services that the City purchases, including the vendors that provide those products and services, and contact information. This should be promoted as part of technical assistance programs as a reference source for these types of products and services that can be obtained locally.

The City should include language that complies with these environmentally preferable product policies in all contracts and specifications, including the City capital improvement program, the

construction and rental of all major public facilities, and in all major land use permits (that requires new developments to comply with these environmentally preferable products policies).

Oceanside should also include take back requirements in supplier agreements and purchasing specifications, as done in San Diego, to get suppliers to take back products and packaging that would otherwise be difficult to reuse, recycle or compost.

All City personnel and all contractors procured by Oceanside should follow these environmentally preferable products policies, including procuring the following environmentally preferable products:

- Printing and Writing Papers, including all imprinted letterhead paper, envelopes, copy paper and business cards, should contain a minimum of 30% post-consumer recycled content.
- Paper Products, including janitorial supplies, shop towels, hand towels, facial tissue, toilet paper, seat covers, corrugated boxes, file boxes, hanging file folders and other products comprised largely of paper should contain a minimum of 30% post-consumer recycled content.
- Re-refined antifreeze, including on-site antifreeze recycling.
- Re-refined lubricating and hydraulic oils.
- Recycled plastic outdoor-wood substitutes (including plastic lumber, benches, fencing, signs and posts) and recycled content construction, building and maintenance products (including carpet, tiles, and insulation).
- Compost, mulch, and other organics including recycled biosolids products.
- Re-manufactured paint.
- Other products that may be designated by Solid Waste and Recycling Division.

City staff is encouraged to reduce their consumption of resources by incorporating the following practice into their daily activities:

- Enable reports, forms and correspondence to be submitted electronically to comply with legal filings.
- Replace one-way shipping containers and pallets with returnable shipping containers.
- Use duplex features on laser printers and copiers. Specify duplex as default on print jobs.
- Send and store information electronically when possible. This includes e-mail, website and electronic fax.
- Recycle all recyclable materials including but not limited to plastics (#1-7), metals, glass, paper, newspaper, cardboard, mixed paper, yard trimmings, e-waste, and construction and demolition debris.
- Consider purchasing materials with a reduced amount of packaging.
- Adopt other waste prevention practices that further the goals of this policy.

Solid Waste and Recycling staff should maintain and use information furnished by other City staff about environmentally preferable and recycled products. That information should include the maximum practical amount of recycled materials and encourage the purchase of such products whenever possible. Solid Waste and Recycling staff should also provide City personnel with vendor furnished information about recycled products and environmental procurement opportunities. All City purchasing agents should inform vendors of the City's Environmentally Preferable Purchasing Policy.

Solid Waste and Recycling should structure applicable contracts to offer and/or feature recycled-content products and to encourage development of specifications used in public bidding aimed at eliminating barriers to recycled-content products. Such barriers include outdated or overly stringent product specifications and specifications not related to product performance.

All requests for proposals should encourage vendors to offer recycled products.

Solid Waste and Recycling should report annually to the Integrated Waste Commission with information on recycling activities, recycling programs, and the environmentally preferable purchasing policy program success. Nothing should require the purchase of products that do not perform adequately and/or are not reasonably available at a reasonable cost (within 10% of original cost).

Compostable Organics Out of Landfills

The City should adopt a resolution to get all compostable organics out of landfills modeled after the COOL2012 campaign.[85] A sample is included in Appendix D.

Oceanside should include in its Mandatory Recycling Ordinance a provision that residents keep "vegetative" food scraps separate from "dry" discards. Vegetative food scraps should be collected together with yard trimmings in the green carts or composted at home once infrastructure is in place.

The City should also educate all landscapers in the City about the significant cost savings and benefits of using local composting sites. For example, tipping fees at Agri Service for landscape debris are currently $20/ton less than the cost of transporting those materials further to the nearest transfer station in Carlsbad.

As part of the development of its food scraps composting program, the City should adopt the hierarchy for food scraps that prioritizes the use of discarded food scraps as follows:

- Prevent wasting of food
- Feed people
- Convert to animal feed and/or rendering
- Compost

This hierarchy, described in more detail in the "Composting" section of this ZW Plan, should be promoted with major generators of food scraps in the area including hotels, motels, bars, restaurants, grocery stores, special events, venues and schools.

Landfilled compostables are the number one source of human-caused methane and a major factor in climate change. Methane is 72 times more potent than carbon dioxide (CO2) over a 20-year period. Every year, landfills emit the greenhouse gas

[85] See: http://www.cool2012.org.

equivalent of 20 percent of U.S. coal-fired power plants.

Shortsighted farming and land use management in the past 100 years are responsible for contributing one-third of the increase in atmospheric CO2, while stripping soils of organic matter, carbon and essential nutrients. Soil rich in organic matter are capable of holding twice the carbon stocks of plants. But like the crops grown in them for food supply, they need to be nourished and well managed in a sustainable manner. The key is to replenish nutrients and organic matter as they are removed by plant uptake, erosion and volatilization. The easiest way to do this is through a cyclical approach already prevalent and proven efficient in nature… returning organic residuals to the soil. This could be done through direct land application or after composting, rather than burning or burying them.

Diverting compostables from Oceanside's landfill cart has many social, economic and environmental benefits. These include the mitigation of climate change through reduction of greenhouse gases and carbon sequestration, job creation, economic stimulation, enhanced food security, support for local sustainable agriculture, decreased water pollution and public health benefits. By composting locally, significant savings also accrue to users and the City by avoiding long-haul transportation costs to distant facilities for composting or landfilling.

While diverting all organics from the landfill cart may seem to be an ambitious goal, there are several key points to consider:

- About half of all food scraps currently discarded can be reduced through upstream, source reduction methods such as modified food purchasing, handling and storage practices and donations to shelters and food banks to feed the underserved, and farms for animal feed (see Appendix J for list of local shelters and food banks, tips on source reduction at work and home, and food bank program development). As one in five Oceanside residents are food insecure (someone who isn't sure where their next meal will come from), donating as much edible food as possible is critical for Oceanside residents to make it during these tough economic times.

- Albertsons highlighted that 30% of all their discarded material five years ago was edible food, so they set up their "Fresh Rescue" Program to donate more food to local food banks and charities. This resulted in significant cost savings to Albertson's and great benefits to the local food banks.

- Approximately half of residentially generated organics and 20% of commercially generated organics are already captured in the green bin.

- Approximately half or more of food scraps is vegetative, pre-consumer material, which is easily diverted and collected from both homes and businesses, and no more volatile nor difficult to process than grass or other yard trimmings.

- Landfilling organics is a relatively new practice. Historically most food scraps were captured to feed pigs and livestock in the region.

This ZW Plan has analyzed existing programs and infrastructure and provides recommendations for source reduction and increased diversion through decentralized and centralized options for food scraps and other compostable organics.

5. Conclusion - No Cost Enhancement for the City

With the adoption of this Plan, new policies for source separation, producer responsibility and organics will encourage local partners and entrepreneurs to invest in programs needed to waste less and recycle more. The City's primary role is to adopt the policies and incentives, educate, promote, enforce and reinforce this new direction.

Waste Management, Agri Service and Moody's are key partners in meeting the City's goal of Zero Waste. They have unequivocally stated their support for the City in achieving its Zero Waste goal. The key to investment from its partners will be comprehensive implementation of existing contracts and working collaboratively on innovations that may be needed.

New partners leading the way to Zero Waste will be Zero Waste Businesses, Zero Waste schools and City community centers. Medium and large businesses and multi-family properties will also work closely with the City to comply with the new State mandate to recycle under AB341. Local retailers will assist by taking back difficult to recycle products and packaging from their customers, creating new customer loyalties. The City will also work with reuse businesses and nonprofits to promote them and help them expand and provide new reuse services.

Key recommendations of this Zero Waste Plan

- **Reduce First** - This ZW Plan focuses on reducing first and designing wastes out of the system. Critical elements include product stewardship and Extended Producer Responsibility (EPR), new policies and incentives, and technical assistance to businesses to comply with AB 341.[86]
- **Food Donations** - Once all source reduction methods are utilized, edible food should be donated to food banks and shelters.
- **Reusable Products** - The City should help form a reuse collaborative with reuse businesses and nonprofits throughout the region to expand marketing, and to foster better distribution systems. The City and WM should work with this collaborative to explore the possibility of developing a Reuse Warehouse.
- **Recycling** - Oceanside has already implemented many of the most feasible recycling options, including its recent transition to single-stream recycling. This ZW Plan will make it easier to recycle and provide more incentives for waste reduction and recycling. Recommendations in this ZW Plan will increase efficiency, fairness, convenience and accessibility to programs as well. Businesses that subscribe for 4 cubic yards of solid waste collection services and multi-family dwellings of 5 units or more must recycle as of July 1, 2012 to comply with AB 341.
- **Composting** – Residents, businesses and schools want more composting services. There was also strong support for including food scraps in the green carts used by residents as soon as arrangements could be made for processing those materials. Agri Service's

[86] In 2011, the State of California adopted AB 341, which requires all major businesses and multi-family dwellings to recycle in California, and establishes a 75% waste diversion statewide goal to be met by 2020.

composting facility is moving to another area on El Corazon and will be permitted to accept food material once relocated.

- **Expanded Outreach** - The City should build upon its existing excellent outreach programs, expanding them to meet the challenge of Zero Waste. Oceanside should partner with local businesses and nonprofits to assist with outreach and education required for implementing this ZW Plan.

- **Partnerships** - Waste Management, Agri Service and Moody's are key partners in meeting the City's goal of Zero Waste. Others include Palmquist Zero Waste School and the Oceanside Unified School District, North County Community Services, Camp Pendleton, the Recycling BIN (Build Infrastructure Now) Coalition, the California Product Stewardship Council, and Zero Waste Businesses.

- **Plastic and Polystyrene** - The City should adopt an Extended Producer Responsibility (EPR) resolution to guide its product stewardship and EPR policies and programs. Then the City should adopt an ordinance to reduce the use of single-use shopping bags. The use of expanded polystyrene food takeout containers should also be phased out.

Residents and businesses that follow and implement the recommended programs will save money. Through adoption of "Cradle to Cradle" take-back programs, producers will cover the costs needed to recover any products or packaging that are currently difficult to recycle. These Zero Waste programs will also reduce transportation and disposal costs for the City, and for local businesses and multi-family units. The City will also reduce its greenhouse gases by 191,905 MTCO2e, the equivalent of removing 37,628 cars from Oceanside roadways each day.

Any additional capital investments required could be made by the City's partners and amortized over the life left in existing contracts. The City can use existing resources derived from waste and recycling programs and waste franchise fees and grants to assist with covering City costs to implement this ZW Plan. In the near future, savings will exceed any costs and less waste will go into landfills and the City's waterways and beaches.

Through adoption of this ZW Plan, the City will ensure that no resident, business, institution or school is left behind on the road to Zero Waste. The recommended policies and programs detailed in this document are sure to have a positive impact on Oceanside's local economy and residents' overall quality of life, while not requiring any additional City fees.

6. Implementation and ZW Plan Timeline

Phase 1 (2012 – 2017)

Year 1:

Adopt the following policies and programs in the first year:

1. Successfully implement new single-stream recycling program so that all residents and businesses can see the benefits of the new system.
2. Update the City's recycling ordinance and provide technical assistance to businesses to comply with the AB341 State mandatory commercial recycling program.

3. Place recycling containers at public facilities wherever trash containers are located, phased in starting with the highest use coastal areas.
4. Expand education and outreach regarding the CA Green Building Code, which requires at minimum a 50% recycling rate.
5. Develop and adopt an EPR resolution to support phasing out toxic products and products that cannot be reused, recycled or composted.
6. Develop a Plastic Bag Reduction Ordinance coordinated with Solana Beach and other nearby jurisdictions.
7. Support and expand school composting, commercial on-site composting and home composting programs. Educate all landscapers working in the City about the cost savings and other benefits of using local composting facilities.
8. Support and expand reuse opportunities in Oceanside.
9. WM conduct a waste generation/characterization study to provide a solid baseline for measuring progress towards its Zero Waste goal.

Years 2 – 5:

Adopt the following policies and programs for years 2-5:

1. Adopt Plastic Bag Reduction Ordinance (Year 2)
2. Develop a program for business and institution waste reduction services that includes: workshops tailored to specific industries, waste audits, technical assistance, educational materials, and a recognition program. Medium and large businesses and institutions could be provided expert support and funding to prevent waste, reduce operating costs and use all resources more efficiently. These services would be offered under the guidance and with the advice of Green Oceanside and would be designed according to principles of community-based social marketing. (Year 2)
3. Develop and adopt a construction and demolition recycling ordinance (Year 2 or 3)
4. Enhance outreach, education, training and enforcement/reinforcement programs
5. Place recycling containers at all public facilities wherever trash containers are located phased in as soon as possible, including all public parks, shopping malls, and transportation depots.
6. Develop and adopt an environmental preferable purchasing program
7. Develop list on City website of businesses or nonprofits that will take back products and packaging from customers that are otherwise difficult to reuse, recycle or compost locally.
8. Develop and adopt take-back policies for sharps, mercury batteries, light bulbs, and pharmaceuticals.
9. Develop plans and timelines for implementing residential and/or commercial food scrap programs. Programs for food scrap diversion should give precedence to the following hierarchy: prevent food waste, feed people, convert material to animal feed and/or rendering, and composting.
10. The City and WM should work with a reuse collaborative to develop a reuse warehouse to help sort and store products, and absorb the ebb and flow of products that are collected prior to distribution. Explore need and interest in Reuse Warehouse and other collaborative ventures or services to expand reuse businesses and nonprofits.
11. Implement the above policies and programs over first five years after adoption of ZW Plan.

Phase 2 (2017-2022)

The following policies and programs should be implemented over the next five years:

1. Support the development of one or more Resource Recovery Parks in the region.

2. Develop take-back policies or industry-sponsored programs for diapers.
3. Evaluate options for going beyond composting of just vegetative food scraps.
4. Evaluate progress towards Zero Waste by 2020 and develop strategy on how to address next solid waste and recycling contract.

Appendix A – Oceanside Council Zero Waste Resolution

RESOLUTION NO. 10- R0636-1

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OCEANSIDE ADOPTING ZERO WASTE AS A GOAL IN ORDER TO ELIMINATE WASTE AND POLLUTION IN THE MANUFACTURE, USE, STORAGE, AND RECYCLING OF MATERIALS

WHEREAS, Zero Waste is a philosophy and visionary goal that emulates natural cycles, where all outputs are simply an input for another process. It means designing and managing materials and products to conserve and recover all resources and not eliminate discharges to land, water, or air that do not contribute productively to natural systems or the economy;

WHEREAS, the California Integrated Waste Management (CIWM) Act of 1989, Assembly Bill 939, required cities and counties to reduce, reuse and recycle (including composting) solid waste generated in the state to the maximum extent feasible before any incineration or landfill disposal of waste, to conserve water, energy and other natural resources, and to protect the environment;

WHEREAS, the CIWM Act of 1989 mandated that California cities and counties divert 50 percent of all waste generated by the year 2000 and pending legislation calls for diversion levels at 75 percent by the year 2020;

WHEREAS, the placement of materials in waste disposal facilities, such as landfills and incinerators, wastes natural resources and wrongly transfers liabilities to future generations, while avoiding the creation of waste or discards in the first place is the most economically efficient and environmentally sustainable resource management strategy and supports a resource recovery based economy that is more sustainable than a disposal-based economy;

WHEREAS, with the appropriate economic incentives, manufacturers can and will produce, and businesses will sell products that are durable and repairable and that can be safely recycled back into the marketplace or nature;

WHEREAS, with the appropriate economic incentives, manufacturers can and will package items in materials that are recyclable or can be returned to nature;

WHEREAS, government is ultimately responsible for establishing criteria needed

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to eliminate waste, for creating the economic and regulatory environment in which to achieve it, and for leading by example;

WHEREAS, diversion of solid waste involves planning for appropriate facilities, inclusion of recycling bins in all multi-family dwellings, and attraction of industries that reuse components of the solid waste stream;

WHEREAS, while the diversion of materials from landfill disposal itself carries a cost, the cost of landfill disposal will continue to increase with no economic return;

WHEREAS, the conservation of these materials will allow new jobs in reuse, dismantling, recycling and composting industries in North County San Diego;

WHEREAS, the CalRecycle (formerly known as the California Integrated Waste Management Board) has adopted "Zero Waste. Its up to you" as the State wide slogan, and

WHEREAS, the City of Oceanside has committed itself to the goals of the Green Oceanside campaign which fosters environmental stewardship and pride within the local community through increased education for all citizens, of all ages, and through the establishment of partnerships between non-profit organizations, businesses and community leaders all dedicated to common key objectives of recycling, waste reduction, composting, conserving water, reduction of greenhouse gas emissions, and preventing waste pollution.

NOW, THEREFORE, the City Council of the City of Oceanside does resolve as follows:

SECTION 1. That the City of Oceanside hereby adopts Zero Waste as a goal in order to eliminate waste and pollution in the manufacture, use, storage, and recycling of materials. This goal can be achieved through action plans and measures that significantly reduce waste and pollution. These measures will include encouraging residents, businesses and agencies to use, reuse, and recycle materials judiciously, in addition to encouraging manufacturers to produce and market less toxic and more durable, repairable, reusable, recycled, and recyclable products;

SECTION 2. That the City of Oceanside hereby establishes a milestone of 75 percent landfill diversion by the year 2020 towards the goal of Zero Waste; and

SECTION 3. That the City Oceanside direct City Staff to report back to the City Council within 6 months with a strategic plan for zero waste with a 75 percent goal by the year 2020.

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PASSED AND ADOPTED by the City Council of the City of Oceanside, California, this 25th day of August, 2010, by the following vote:

AYES: WOOD, FELLER, KERN, LOWERY, SANCHEZ

NAYS: NONE

ABSENT: NONE

ABSTAIN: NONE

MAYOR OF THE CITY OF OCEANSIDE

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney

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Appendix B - Green Building Policy

WHEREAS, conservation and energy efficiency should be the first initiatives pursued for green buildings as they are the least expensive and most environmentally protective resources; and

WHEREAS, commercial buildings use 36 percent of the state's electricity and account for a large percentage of greenhouse gas emissions, raw materials use and waste; and

WHEREAS, buildings account for one-sixth of the world's fresh water withdrawals, one-quarter of its wood harvest, and two-fifths of its material and energy flows;[87] and

WHEREAS, building "green" is an opportunity to use our resources efficiently while creating healthier buildings that improve human health, build a better environment, and provide cost savings; and

WHEREAS, a "green" building is a structure that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. Green buildings are designed to meet certain objectives such as protecting occupant health; improving employee productivity; using energy, water, and other resources more efficiently; and reducing the overall impact to the environment; and

WHEREAS, green buildings can reduce the rate of respiratory disease, allergy, asthma, sick building symptoms, and enhance worker performance;[88] and

WHEREAS, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED), the nation's leading green building rating system, promotes "high performance" building practices; energy, water and materials conservation; environmentally preferred products and practices; improvements in employee health, comfort and productivity; and reductions in facility operation costs and environmental impacts; and

WHEREAS, the California Building Standards Commission adopted the California Green Building Standards Code, which requires buildings to reduce water and energy use through landscaping, appliance efficiency, building design, and the use of recycled materials.[89]

WHEREAS, high-performance schools also reduce energy and resource consumption, while creating safer and healthier learning environments; and

WHEREAS, investments in energy efficiency measures provide high returns on investment and boost California's economy, creating more jobs, local spending and tax revenue.

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[87] D.M Roodman and N. Lenssen, A Building Revolution: How Ecology and Health Concerns are Transforming Construction, Worldwatch Paper 124, Worldwatch Institute, Washington, DC, March 1995, p. 5. Source: http://www.calrecycle.ca.gov/GreenBuilding/Basics.htm

[88] William Fisk and Arthur Rosenfeld, Potential Nationwide Improvements in Productivity and Health From Better Indoor Environments, Lawrence Berkeley National Laboratory, May 1998. Source: http://www.calrecycle.ca.gov/GreenBuilding/Basics.htm

[89] See: http://www.documents.dgs.ca.gov/bsc/prpsd_stds/combined_green_et_7_08.pdf

NOW, THEREFORE, THE CITY OF OCEANSIDE RESOLVES:

1. This green building policy is to guide the city's use of green buildings and the construction of all new buildings and demolition of buildings in Oceanside. This policy initially focuses on policies and programs to support the City's goal of Zero Waste. This policy should be supplemented once the following initiatives are underway with additional policies to support other green building issues, particularly energy use and water uses and meeting LEED, Build it Green and other green building certification standards.
2. The City should adopt a construction and demolition recycling ordinance. This ordinance would require contractors of projects over a certain threshold to recycle a targeted amount of material for all construction and demolition projects. The construction and demolition ordinance should require deposits and plans on how to achieve the specified waste diversion goals, as well as incentives to firms that deconstruct buildings and reuse materials. Plans should be required on how to meet a 50% recycling goal initially, then gradually increased to the new state goal of 75% diversion. Deposits should be required and returned when the project is over and this target has been met.
3. The City should advertise training locally for contractors, architects, engineers and developers on what is required by the new State Green Building Code that took effect January 1, 2011.
4. Oceanside should provide incentives for green buildings such as authorizing them to "go to the head of the line" in City permitting procedures and reduced permit fees based on the level of sustainability achieved.[90]
5. The City should provide a preference in leasing buildings to lease space from green buildings.
6. Oceanside should provide incentives for use of products that are more durable, have a longer lifespan, require no additional finishing on-site, have less frequent maintenance and repair cycles, and give credits for products made from reused and recycled content.
7. The City should value reused products by the price for which they are sold, or some multiple of their weight, to reflect the higher value of reuse. The City should adopt a policy to support adaptive reuse of old buildings as a priority before approving of demolition of still usable buildings.
8. The Community Services Department shall submit a biennial report to the Council commencing in one year from adoption of this policy on the progress toward meeting these goals.
9. Nothing in this policy shall be construed to confer upon any city agency decision-making authority over substantive matters within another agency's jurisdiction, including any informational and public hearing requirements needed to make regulatory and permitting decisions.

Source: based on excerpts from resources on CalRecycle Green Building website: http://www.calrecycle.ca.gov/GreenBuilding/

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[90] Encinitas has a Green Building Incentive Program that offers priority plan checks for all projects registered with Build It Green or LEED. Upon completion of construction and certification, projects are also eligible for reimbursement of green building costs up to $2,000 per project. Certified projects are also recognized at a City Council meeting. Source: http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1852#CA

Appendix C - Environmentally Preferable Purchasing Policy

I. Purpose
This policy is to support the purchase of recycled and environmentally preferred products to minimize environmental and health impacts from city activities. Employees can make a significant difference by purchasing environmentally preferred products and services whenever possible. This policy empowers staff to consider environmental and health attributes or benefits along with price and performance standards. The city supports waste prevention, recycling and use of recycled supplies and materials as a city priority. This is consistent with state requirements to reduce wastes and recycle more to reduce environmental impacts that also cause climate change, under AB939, AB32 (2006) and AB341 (2011). The latter law set a new goal for the state to recycle 75% of all discarded materials by 2020.

II. Definitions
"Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

"Waste Prevention" means any action undertaken by an individual or organization to eliminate or reduce the amount or toxicity of materials before they enter the municipal solid waste stream. This action is intended to conserve resources, promote efficiency, and reduce pollution.

"Environmentally Preferable Products" means products that have a lesser impact on human health and the environment when compared with competing products. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation and/or disposal of the product.

"Recycled Products" are products manufactured with discarded products or materials that have been recovered or diverted from the waste stream. Recycled material may be derived from post-consumer waste (material that has served its intended end-use and been discarded by a final consumer), industrial scrap, manufacturing discards and/or other discarded products that otherwise would have been wasted.

"Practical" means sufficient in performance and reasonably available at a reasonably competitive cost.

III. Policies

Within 1 year of adoption of this Policy, all City staff will:

1. Encourage waste prevention, recycling, market development and use of recycled and recyclable supplies and materials through lease agreements, contractual relationships and purchasing practices with vendors, contractors, businesses and other governmental agencies.

2. Generate less waste material by reviewing how supplies, materials and equipment are manufactured, purchased, packaged, delivered, used, and disposed.

3. Submit an environmentally preferable products (EPP) review sheet to the Solid Waste and Recycling Division prior to major purchases and major contracting for design and construction services (except for emergency purchases which are exempt).

4. Apply the Precautionary Principle to all major city purchases and design and construction contracts. Solid Waste and Recycling should meet with each city department to identify products and services that may either be wasteful or toxic, and explore alternatives to current practices, or how to design the waste out.

5. Establish a website that lists all green, recycled, reusable, recyclable and compost products and services that the city purchases, including the vendors that provide those products and services, and contact information. This should be promoted as part of technical assistance programs as a reference source for these types of products and services that can be obtained locally.

6. Include language that complies with these environmentally preferable product policies in all contracts and specifications, including the city capital improvement program, the construction and rental of all major public facilities, and in all major land use permits (that requires new developments to comply with these environmentally preferable products policies).

7. Include take back requirements in supplier agreements and purchasing specifications to get suppliers to take back products and packaging that would otherwise be difficult to reuse, recycle or compost.

IV. Best Practices

The following are attributes that can be used in evaluating whether a given product or service is environmentally preferable:

- Alternative Energy Source
- Bio-based
- Biodegradable
- Compostable
- High Recycled Content
- Low Toxicity
- Low Volatile Organic Compound (VOC)
- Pollution (air, water, solid waste) Reduction
- Recyclable
- Repairable
- Resource Efficient (water conserving and/or energy efficient
- Reusable

All City personnel and all contractors procured by Oceanside should follow these environmentally preferable products policies, including procuring the following environmentally preferable products whenever practical:

- Printing and Writing Papers, including all imprinted letterhead paper, envelopes, copy paper and business cards, shall contain a minimum of 30% post-consumer recycled content.

- Paper Products, including janitorial supplies, shop towels, hand towels, facial tissue, toilet paper, seat covers, corrugated boxes, file boxes, hanging file folders and other products comprised largely of paper shall contain a minimum of 30% post-consumer recycled content.

- Re-refined antifreeze, including on-site antifreeze recycling.

- Re-refined lubricating and hydraulic oils.

- Recycled plastic outdoor-wood substitutes (including plastic lumber, benches, fencing, signs and posts) and recycled content construction, building and maintenance products (including carpet, tiles, and insulation).

- Compost, mulch, and other organics including recycled biosolids products.

- Re-manufactured paint.

- Other products that may be designated by Solid Waste and Recycling.

City staff is encouraged to reduce their consumption of resources by incorporating the following practices into their daily activities:

- Enable reports, forms and correspondence to be submitted electronically to comply with legal filings.
- Replace one-way shipping containers and pallets with returnable shipping containers.

- Use duplex features on laser printers and copiers. Specify duplex on print jobs.

- Send and store information electronically when possible. This includes e-mail, website and electronic fax.

- Recycle all recyclable materials including but not limited to plastics (#1-7), metals, glass, paper, newspaper, cardboard, mixed paper, yard trimmings, e-waste, construction and demolition debris, etc.

- Consider purchasing materials with a reduced amount of packaging.

- Adopt other waste prevention practices that further the goals of this policy.

V. Responsibilities of Solid Waste and Recycling Division:

Solid Waste and Recycling shall:

- Maintain and use information, furnished by other city staff, about environmentally preferable and recycled products containing the maximum practical amount of recycled materials and encourage the purchase of such products whenever possible.

- Provide city personnel with vendor furnished information about recycled products and environmental procurement opportunities and inform vendors of the city's Environmentally Preferable Purchasing Policy.

- Help city staff structure applicable contracts to offer and/or feature recycled-content and environmentally preferable products whenever practical.
- Encourage development of specifications used in public bidding aimed at eliminating barriers to recycled-content products, such as outdated or overly-stringent product specifications and specifications not related to product performance.

- Report annually to the Integrated Waste Commission with information on recycling activities, recycling programs, and the environmentally preferable purchasing policy program success.

VI. Exemption

Nothing should require the purchase of products that do not perform adequately and/or are not reasonably available at a reasonable cost (within 10% of original cost).

Appendix D - Compostable Organics Out of Landfills Resolution

WHEREAS, landfilling biodegradable materials, such as food, paper, yard trimmings and agricultural products is greatly contributing to global warming.

WHEREAS, more than 75,000 tons of these biodegradable materials, including paper products, food scraps, yard trimmings, wood and soils are landfilled by the city of Oceanside every day. These materials amount to approximately half of the city's discarded resources, and when buried in a landfill, decompose without oxygen and generate methane, an efficient atmospheric heat-trapping gas and a major factor in climate change.

WHEREAS, methane is now understood to be 72 times more potent than CO2 in causing climate changes over a 20-year period, the amount of time scientists have determined is left before the planet passes the "tipping point" on irreversible climate change. Landfills are the number one source of human-caused methane in the United States and emit the greenhouse gas equivalent of 20 percent of our country's coal-fired power plants every year.

WHEREAS, landfilling any material wastes valuable natural resources. Discarded organic materials contain vast stores of macro- and micro-nutrients needed by agricultural and natural ecosystems to replenish soils. When these materials are not returned to the soil, other nutrient sources must be found. In most cases, petroleum-based and energy-intensive fertilizers are imported and substituted for natural nutrient sources.

WHEREAS, commercial farming and shortsighted land use policies favoring energy-intensive pesticides, fertilizers and irrigation water have resulted in dramatic increases in greenhouse gases discharged into the atmosphere for more than fifty years. These practices have contributed to one-third of the increase in atmospheric CO2, while causing erosion, sedimentation, water pollution and the progressive stripping of organic matter, beneficial microbes, carbon and other essential nutrients from our soils.

WHEREAS, healthy soils are capable of holding twice the carbon stocks of plants. Release of soilbound carbon through tilling and other shorthsighted farming practices causes soils to *contribute to*, rather than protects against, global warming. These methods also compromise the ability of soil to grow food locally, nutritiously, and sustainably.

WHEREAS, healthy soils restored with organic materials protect against flooding, erosion, and drought, promote biodiversity, filter pollutants, buffer soil acidity, and suppress plant diseases and pests while bolstering agricultural yields.

WHEREAS, agriculture is a major industry in Oceanside and urgently requires the healthier soils that can be produced through diverting organic materials from the landfill and returning the nutrients and organic matter back to farmland to grow its own. This is a critical component of re-creating a more sustainable economy.

WHEREAS, the quickest and cheapest way to immediately reduce our community's greenhouse gas emissions and improve the health of soils in the City is to get compostable organics out of landfills and back into our soils through composting and anaerobic digestion technologies.

THEREFORE, we agree to phase these materials out of our landfills, and to redirect these materials back to our soils as useful soil amendments. Staff will establish a plan on how to best accomplish this and how to work with local agencies to encourage the use of compostable organics to sustain the health of our soils.

Appendix E - Portland "Fork It Over!" Program with Oregon Food Bank

The "Fork It Over!" food donation program was launched in 2004, but the Metro government has been working with the Oregon Food Bank since the mid 90s to divert food from the landfill and feed people in the Portland metropolitan area. A multitude of food rescue agencies will accept dropped off food or pick it up directly from its source of generation. Oregon Food Bank is the hub of a network of 919 hunger-relief agencies throughout the state of Oregon and Clark County, Washington.

An affiliate of America's Second Harvest, the Oregon Food Bank "recovers food from farmers, manufacturers, wholesalers, retailers, individuals and government sources. It then distributes that food to 20 regional food banks across Oregon. Sixteen are independent charitable organizations. OFB directly operates the four regional food banks serving the Portland metro area, Tillamook and southeast Oregon. Those four centers distribute food weekly to 348 food pantries, soup kitchens, shelters and other programs helping low-income individuals in Clackamas, Clark, Multnomah, Washington, Tillamook, Malheur and Harney counties. OFB also works to eliminate the root causes of hunger through advocacy, nutrition education, learning gardens and public education."

Collection from food rescue agencies is available on a regularly scheduled or call-in basis. Metro and its local governmental partners provide assistance to companies wanting to participate in the program. Support includes visits to businesses to assess what can be donated and help with program start-up, free instructional posters, and free window stickers that let customers know the business participates in the program. Following are some general categories of foods accepted:

- Unserved menu items
- Unserved buffet foods
- Produce
- Dairy items
- Deli items
- Catered foods
- Baked goods
- Meats and seafood

In fiscal year 2000-2001, local food banks and charitable organizations in the Metro region recovered approximately 10,614 tons of food. The Oregon Food Bank estimated that 2,122 tons, or approximately 20 percent of this food would have been landfilled if not donated.

Metro assisted food diversion and donation efforts with research and found storage and refrigeration space was a critical issue in both collection and distribution of recovered food. A grant program was developed for "assistance and support to enhance capacity to accommodate new and increased flow of perishable food items" and have been used to "primarily to build the transportation and storage capacity of food rescue agencies in the Metro region." From 1999 to 2002, nearly $580,000 in grants were disbursed and paid for:

- 4 walk-in coolers

- 18 reach-in refrigerators
- 19 reach-in freezers
- 10 outdoor shelter canopies
- 2 collection trucks
- 9 months driver salary and volunteer driver gasoline allowances

Agencies receiving these grants estimated additional food recovery as a result of the program at 5,181 tons, with avoided disposal costs $647,650 and a dollar value to food banks from additional recovered food worth $17,305,208.

A cost-benefit analysis showed a net benefit of the $573,406 invested in grants at an estimated $17 million or more, with an average return of $31 in value for every dollar spent.

Metro also assisted in outreach programs targeting retail grocery stores, restaurants, hotels, institutional cafeterias, and wholesale produce warehouses. The *Restaurant and Food Service Guide to Food Donation,* "designed to educate restaurants and businesses about the benefits and ease of food donation," was developed and published in 2001. More than 4,500 brochures were distributed through Metro, local governments, county restaurant inspectors, and food rescue agencies as well.

A brochure entitled *Food Donation Resource Guide,* and a web-based version on the Metro website as well have been developed and are updated to enable businesses to connect with food rescue agencies in their area. The web-based version features an online search tool that brings up the listings of organizations closest to them after they enter their address and the food items they want to donate. "Waste Reduction and Food Donation 101" presentations are given every six weeks with each new, incoming class at the Western Culinary Institute The first presentation was compelling enough to prompt the school to set-up their own donation program.

Appendix F - Commercial Recycling Ordinance Changes

The following changes are recommended to Chapter 13 of the Oceanside Municipal Code to implement the Zero Waste Plan. Proposed additions are underlined in text and deletions are indicated by strike-outs. Some of the recommended changes (particularly those regarding source separation and exceptions) are from the Sample Commercial Recycling Ordinance prepared by the Institute for Local Government.[91]

Sec. 13.16. - Mandatory solid waste disposal.

(a)

Solid waste shall be removed from property within the city as set forth in this chapter

(b)

Except as otherwise provided in this chapter, every person in possession, charge or control of any place or premises in the city shall dispose of solid waste through an authorized collector according to the provisions of this section, and shall pay the fee or fees for such services established according to this chapter. Except as otherwise provided by law, this section shall apply to premises owned or operated by the United States, the State of California, or any agency or political subdivision thereof.

(c)

Solid waste shall be removed from any occupied residential premises at least once per week.

(d)

Solid waste shall be removed from an occupied commercial premises at least once per week, provided that solid waste from an establishment selling or serving food products, shall be removed at least twice per week.

(e)

Solid waste shall be removed from an occupied industrial premises at least once per week, provided that solid waste from an industrial premises that manufactures or processes food products or creates solid waste that is putrescible shall be removed at least twice per week.

(f)

Solid waste shall be removed from an unoccupied premises within one week after written notice has been mailed by first class mail to the owner as shown on the last equalized assessment roll.

(g)

The City Solid Waste and Recycling Contract Administrator, may required a greater number of collections, or a greater number of collection receptacles, pursuant to the provisions of this subsection. In the event that solid waste being disposed of from an occupied commercial, industrial or multifamily residential premises exceeds the capacity of the bin, roll-off container, or other authorized container for disposal of solid waste, provided for the premises, is reported by the authorized collector or any employee of the city authorized to enforce the provisions of this chapter, the City Solid Waste and Recycling Contract Administrator may issue written notice to the owner of the property and to the property manager and/or tenant(s) (as applicable) ordering remedial action. The order shall state the options available for remedial action and shall give thirty (30) days for implementation of the remedial action. Remedial action may include, but is not limited to, reduction of the waste through recycling as provided in this chapter, increasing the number of collection containers, increasing the size of the collection containers or increasing the

[91] http://www.ca-ilg.org/sites/ilgbackup.org/files/resources/Sample_Commercial_Recycling_Ordinance_FINAL_0.doc

frequency of collection. If the order is not implemented within thirty (30) days of the date it is issued, the City Solid Waste and Recycling Contract Administrator may direct the authorized collector to implement one or more of the remedial actions stated in the order at the expense of the owner, property manager or tenant (as appropriate).

(h)

All designated recyclable materials shall be separated from other solid waste. The owner, operator, and/or occupant of any premise, business establishment, industry, or other property, vacant or occupied, shall be responsible for the safe and sanitary storage of all solid waste, and designated recyclables, accumulated on the property. Containers for designated recyclables shall be provided by collectors to each customer, for collection of designated recyclables The disposal of designated recyclable materials mixed with other solid waste is prohibited.

(i)

SOURCE SEPARATION REQUIREMENTS

A. Each Generator shall be responsible for ensuring and demonstrating its compliance with the requirements of this ordinance. Each Generator shall:

1. Source Separate Recyclable Materials from Solid Waste; and

2. Subscribe to a basic level of Recycling service that includes at a minimum, the collection of Recyclable Materials; and

3. Enter into a written service agreement with the City's Franchised Hauler or another Authorized Recycler; or

4. Complete and retain on-site a Self Hauling form certifying that all Self Hauling activities will be completed in accordance with this ordinance or any other applicable law or regulation. A copy of such form shall be available to the City Solid Waste and Recycling Contract Administrator, upon request.

B. Each Generator shall use containers to collect and store Recyclable Materials and shall designate areas to collect and/or store Recyclable Materials.

C. Each Generator shall prominently post and maintain one or more signs in maintenance or work areas or common areas where Recyclable Materials are collected and/or stored that specify the materials to be Source Separated in addition to collection procedures for such materials.

D. Each Generator shall notify and instruct employees in writing of applicable Source Separation requirements, including outreach and training on what materials are required to be Source Separated and how to Source Separate such material. A copy of such instruction or training materials shall be provided to the City Solid Waste and Recycling Contract Administrator or designee upon request.

E. All Recyclable Materials shall be placed for collection in covered collection containers conforming to the following requirements. No container shall be loaded beyond its capacity. It shall be the Generator's responsibility to keep the containers used for the storage and collection of Recyclable Material generated on the premises in a clean and sanitary condition. No material or containers shall be kept or handled in such a manner as to become a nuisance. No putrescible materials shall be commingled with Recyclables. No Recyclable Material shall be allowed to become odoriferous or a producer of vermin. Lids on containers shall remain closed at all times while stored or placed for Collection. The City Solid Waste and Recycling Contract Administrator is specifically authorized to promulgate rules and regulations regarding any and all Recyclable Material containers including as related to the Recyclable Materials to be placed therein, the placement and maximum weight of high-density materials for Collection and the proper use of containers.

F. Each Generator shall ensure that Recyclable Materials generated at the Generator's site will be taken only to a Recycling or Composting Facility or make other arrangements to ensure that the materials are Recycled or Composted and not delivered to a Landfill for Disposal. Generator shall not dispose of, or arrange for Disposal of Recyclable Materials by placement in a Landfill except

in an emergency situation, or when no viable markets or Recycling Facilities are available, as determined by the City Solid Waste and Recycling Contract Administrator. Further, all Generators are encouraged to consider Recycling additional materials, whether or not they have been specifically designated by the City Solid Waste and Recycling Contract Administrator.
G. The Recycling Service Agreement and other Recycling documents shall be available for inspection by the City Solid Waste and Recycling Contract Administrator or designee, at the principal location of the Generator's Business, Commercial Facility, Special Event or non-residential property during normal business hours.
H. No Franchised Hauler or Authorized Recycler shall be held liable for the failure of its Customers to comply with such regulations, unless specified in the Franchise, contract or permit issued by the Agency.
(j)
The following recyclable material designations apply to all collectors of solid waste generated in the City of Oceanside.
RESIDENTIAL RECYCLABLES
(a) Aluminum, glass bottles and jars, mixed paper, cardboard, newspaper, plastic bottles (#`1-7), tin and bi-metal cans, white goods (appliances), and yard wastes.
COMMERCIAL RECYCLABLES
(a) Corrugated cardboard, office paper and commingled containers (including aluminum, glass bottles and jars, plastic bottles (#`1-7), tin and bi-metal cans) from all the following categories of businesses:

(1) Office buildings of more than 20,000 square feet used for commercial, governmental, or educational purposes.

(2)Hospitality facilities, which includes all restaurants and taverns, and hotels and motels with eating and drinking establishments.

(3) Businesses, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofitentity, or a multifamily residential dwelling and that generates more than four cubic yards of commercial solid waste per week or is a multifamily residential dwelling of five units or more shall take at least one of the following two actions:

(a) Source separate recyclable materials from solid waste and subscribe
to a basic level of recycling service that includes collection, self-hauling,
or other arrangements for the pickup of the recyclable materials.

(b) Subscribe to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation.

(4) A property owner of a multifamily residential dwelling may require tenants to source separate their recyclable materials to aid in compliance **with this section.**

INDUSTRIAL RECYCLABLES
Industrial loads consisting of 90% or more of any one of the following materials: asphalt, concrete, dirt, land clearing brush, sand, or rock.
(k)
EXCEPTIONS
Exceptions may be granted if the City Solid Waste and Recycling Contract Administrator determines that there is documented evidence that the solid waste is from generators participating in an approved source-separated recycling program that diverts over 75% of all collected

materials from landfills or incinerators, or that it is a type of material (for example roofing debris) not currently being recycled by local recycling facilities. Generator may be exempt from the requirements of this Chapter if the Generator demonstrates to the City Solid Waste and Recycling Contract Administrator that there are no Recyclable Materials being generated by any activities in the Generator's Business, Commercial Facility, or non- residential property. Generator may be exempted from the requirements of this Chapter by the City Solid Waste and Recycling Contract Administrator, if it is determined, through a site visit requested by the Generator, that either:
(a) There is inadequate storage space for automatic lift containers, bins or roll off bins for Recyclable Materials on site and that it is infeasible for the Generator to share automatic lift containers, bins or roll off bins for Recyclable Materials with a Generator on an adjoining property, or;
(b) Compliance with this Chapter will result in a violation of zoning codes or agency regulations for minimum parking spaces.
If, after reviewing the site, the City Solid Waste and Recycling Contract Administrator determines that it is feasible for Recycling containers to be place either on site or shared with an adjoining business or property, then the Generator will not be exempted from these requirements and will be responsible for full compliance with this Chapter.

Nothing in this ordinance shall preclude any person from Self Hauling Recyclable Materials generated by that person to a Recycling Facility. A Generator may transport Recyclable Materials generated at its business or property to a Recycling Facility (rather than hiring a Franchised Hauler or Authorized Recycler) only if the Generator completes its activity by utilizing a vehicle owned by either the Generator or Generator's employee.

This Self Haul exemption does not include contracting for or hiring a third party to transport the Recyclable Materials.

Self Hauler must retain on site a Self Hauling form certifying that all Self Hauling activities will be completed in accordance with this Chapter or any other applicable law or regulation. The Self Hauling form shall be made available to the City Solid Waste and Recycling Contract Administrator or designee upon request. The City Solid Waste and Recycling Contract Administrator may restrict or prohibit Self-Hauling by a Generator if the City Solid Waste and Recycling Contract Administrator determines, after providing notice and an opportunity for a hearing, that the Generator's Self Hauling activities violate the provisions of this Section or any other applicable law or regulation.

Nothing in this ordinance shall preclude any Generator from selling or exchanging at fair market value, for reuse or Recycling, Source Separated Recyclable Materials generated from that Business, Commercial Facility or property; or from donating to another entity for reuse or Recycling; Source Separated Recyclable Materials generated from that Business, Commercial Facility or property.

Appendix G - Construction and Demolition Recycling Ordinance

The City Council of the City of Oceanside ordains as follows:

Section 1. The City Council finds and determines that Public Resources Code sections 41780 et seq., also known as the Integrated Waste Management Act, requires each local jurisdiction in the State to divert at least 50% of solid waste from landfills. Every city and county in California may face fines up to $10,000 a day for not meeting the State law requirement. Reusing and recycling construction and demolition debris is essential to reducing landfill solid waste disposal. Construction and demolition debris waste reduction and recycling programs have been proven to reduce the amount of solid waste deposited in landfills. Except in unusual circumstances it is feasible to divert 70 percent or more of all construction and demolition debris from construction and demolition projects.

Chapter 13 of the Oceanside Municipal Code is amended to add Article __, as follows:

PURPOSE

The purpose of this article is to establish the Construction and Demolition Materials Diversion Program in the City of Oceanside. This program is intended to increase diversion of construction and demolition materials from landfills, conserve landfill capacity, extend the useful life of local landfills and avoid potential consequences to the City if it fails to comply with State waste diversion requirements.

DEFINITIONS

For the purposes of this Article, the following definitions shall apply:

(a) "Applicant" means a person who applies to the City of Oceanside for a permit for an applicable project.

(b) "Applicable project" means a construction or demolition project subject to a threshold in section 68.510(a).

(c) "Chipping and grinding operation" means an operation or facility that does not produce compost or that mechanically reduces the size of or otherwise engages in the handling of compostable material.

(d) "Construction" means the act of building, making, erecting, remodeling, repairing, renovating, or improving a "structure," as that term is defined in the California Building Code and includes any project for which the City requires a building permit.

(e) "Construction and demolition debris" means nonhazardous waste building material, inert material, soil, packaging, green material and rubble resulting from construction or demolition.

(f) "Conversion rate" means the rate in the standardized Conversion Rate Table approved by the City pursuant to this article for use in estimating the volume or weight of materials identified in a Debris Management Plan (DMP).

(g) "Debris Management Plan (DMP)" means a plan for diverting construction or demolition debris required by this article.

(h) "DMP compliance official" means a person responsible for implementing this article.

(i) "DMP permittee" means a person who is required to divert construction or demolition waste under this article and who has an approved DMP.

(j) "Demolition" means the act of removing, razing or tearing down a structure or any portion of a structure.

(k) "Director" means the director of the Community Services Department.

(l) "Divert" means to reuse or recycle construction or demolition debris.

(m) "Diversion requirement" means the requirement in this article to divert a percentage of construction and demolition debris generated by an applicable project.

(n) "Green Material" means any materials related to land development such as yard trimmings, trees, brush and construction and demolition wood waste. Green material does not include food material, bio-solids, mixed solid waste material processes from co-mingled collection, wood containing lead-based paint or wood preservatives, mixed construction or mixed demolition debris.

(o) "Green material processing operations" means a facility or center that processes green material through composting, chipping or grinding operations.

(p) "Inert debris" has the same definition as the term is defined in California Code of Regulations Title 14, section 17381(k)and means materials such as concrete, soil, asphalt, ceramics and masonry.

(q) "Permitted construction and demolition and inert recycling center" or "CDI center" means a facility or center for which the Local Enforcement Agency has issued an oversight permit to allow the facility or center to receive or process construction, demolition or inert debris.

(r) "Project" means any construction or demolition, which requires a building or demolition permit, or any similar permit.

(s) "Recycling" means the process of collecting, sorting, cleansing, treating and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

(t) "Reuse" means further or repeated use of construction and demolition debris.

(u) "Salvage" means the controlled removal of construction and demolition debris from a permitted building or demolition site for the purpose of recycling, reuse, or storage for later recycling or reuse.

THRESHOLD FOR APPLICABLE PROJECTS

(a) During the first 12 months after the effective date of this article, an applicable project shall be one in which the total square footage of demolition and/or construction is equal to or greater than 40,000 square feet. In measuring the square footage of a project each floor of a building shall be counted, not just the building's footprint. Projects shall also include paved areas, walkways, driveways, parking areas, decks, patios or any other landscape areas that are demolished, constructed, excavated and/or graded. For the purpose of determining whether a project meets the foregoing thresholds, all phases of a project and all related demolition, construction, excavation or grading occurring on the same or other parcels, as determined by a DMP compliance official, shall be deemed a single project.

(b) All construction and/or demolition projects conducted by the City shall be subject to the thresholds established by this article. The project lead or its contractor shall submit a DMP to the DMP compliance official prior to beginning any activities.

(c) All applicable projects shall comply with this article.

SUBMISSION OF DEBRIS MANAGEMENT PLAN

(a) An applicant for a project subject to a threshold in section 68.510 shall submit a completed City Debris Management Plan (DMP) with an application for a building permit and/or demolition permit to the Community Services Department. The DMP shall provide the following information:

The type of project;
The total square footage of the project;
The estimated volume or weight of project construction and demolition debris, by material type that the project will generate;
The maximum volume or weight of construction and demolition debris that can feasibly be diverted via reuse or recycling;
The estimated volume or weight of construction and demolition debris that will be disposed of in a landfill; and
The name and address of any person and/ or recycling facility the applicant proposes to use to collect, process or receive construction and/ demolition debris the project will generate.

(b) The City shall prepare a list of recyclers who accept construction and demolition materials in the City of Oceanside. The City shall make the list available to any person upon request.

(c) The City shall prepare conversion rates tables that shall be used by an applicant to calculate the volume and weight of construction and demolition debris.

SEC. 68.512. PERFORMANCE GUARANTEE

(a) The applicant for any applicable project shall submit a performance guarantee to the Community Services Department as a condition of a building or demolition permit.

(b) A performance guarantee may be in the form of any combination of the following: cash deposit, irrevocable letter of credit or other recognized form of security the City determines is acceptable.

(c) Cash deposits for a performance guarantee shall be deposited in an interest bearing account and returned with interest, to the Debris Management Plan permittee upon the City's determination of full compliance, or prorated based on the degree of compliance. Any forfeited performance guarantee, including interest on a cash deposit will be used first to recover the City's administrative costs related to processing the DMP. Remaining funds shall be used only for programs to develop or improve the infrastructure for construction and demolition debris.

(d) The amount of a performance guarantee required shall be determined by the following schedule:

Performance Guarantee Values

Building Segment	Guarantee per Sq. Ft.	Maximum Sq. Ft. Subject to Guarantee
Residential	$0.20	125,000 detached 100,000 attached
Non-residential	$0.20	40,000 commercial 75,000 industrial

DEBRIS MANAGEMENT PLAN

(a) During the first 12 months after the effective date of this article an applicable project shall recycle 90 percent of inert construction and demolition debris and 50 percent of all other construction and demolition debris. After this article has been in effect for 12 months an applicable project shall recycle 90 percent of inert debris and 70 percent or all other construction and demolition debris.

(b) Notwithstanding any other provision of this code, no building permit shall be issued for any applicable project unless a DMP compliance official has approved the Debris Management Plan (DMP). Approval shall not be required, however, when emergency demolition is required to protect public health or safety. A DMP compliance official shall approve a DMP if he determines that all of the following conditions have been met:
The DMP provides all of the information required by section 68.511(a) and
The DMP complies with subsection (a) above.

INFEASIBILITY EXEMPTION

(a) If it is infeasible for an applicant for an applicable project to comply with all of the requirements of section 68.513(a) the applicant may apply for an exemption. For the purposes of this section "infeasible" means that there is no recycling, salvage, or construction demolition inert

processing (CDI) center or onsite reuse options for all or part of the construction or demolition debris a project will generate within a 50 mile radius of the project area, any location from which the applicant regularly operates it's business, or stores its construction or demolition equipment. The applicant shall apply for the exemption on a form provided by the City at that same time as the applicant submits the DMP required by section 68.511(a).

(b) If a DMP compliance official grants the applicant's request for an exemption, the official shall determine what percentage of construction and demolition debris the applicant is required to recycle. In reaching his determination, the official may consult with any State or local official and the applicant. The official shall issue his determination in writing and serve it under section 11.112 of this code.

(c) Within 15 days from the date the official serves the notice, the applicant shall submit a revised DMP or file an appeal under section 68.517.

COMPLIANCE WITH DEBRIS MANAGEMENT PLAN

(a) For each construction or demolition site for which the DMP permit is issued, the DMP permittee shall maintain a daily log for all construction or demolition debris that leaves the site along with the corresponding receipts from any CDI center, recycling center, vendor, green materials operation or disposal or transfer station facility which accepted debris from the DMP permittee. The log and receipts shall contain the weight of the debris the facility accepted and whether the material was disposed in a landfill or recycled. The log shall be made available to any City inspector or DMP compliance official responsible to insure compliance with this article. The permittee's failure to have the log or the information required by this subsection available for inspection constitutes grounds for suspension of the DMP permit.

(b) After construction or demolition begins, a DMP permittee shall submit evidence to the DMP compliance officer demonstrating that the permittee is complying with the approved DMP. At the end of every quarter thereafter until 180 days after the City issues a certificate of occupancy or for a project with multiple phases, the last certificate of occupancy for the project, the DMP permittee shall submit proof of compliance with the DMP. The permittee shall submit quarterly reports according to the following schedule:

Timeframe	Due Date
January to March	April 15
April to June	July 15
July to September	October 15
October to December	January 15

The first report shall be submitted upon first quarterly due date following the project start date. Example: Project starts February 15th, first quarterly report due April 15th.

(c) Proof of compliance required to satisfy the permittee's obligation under subsection (a) above shall be the following:

Receipts from each CDI center, recycling center, vendor, green materials operation and disposal or transfer station facility which accepted construction or demolition debris from the DMP

permittee, that contain the weight of the debris the facility accepted and whether the material was disposed in a landfill or recycled.
If a receipt from a recycling center or other facility in paragraph (1) does not contain a statement of the weight of the debris, the DMP permittee shall provide a print out or other verifiable statement of the weight of the debris, produced by a weighing device with a current registration certificate from the City Sealer.

If it is impracticable to weigh the construction or demolition debris the DMP permittee shall measure the debris and submit a statement of the volume along with the calculation of the weight of the debris using the City's conversion rate table as referenced in section 68.511(c)
If the material was reused onsite or collected by a third party for salvage, the DMP permittee shall provide a receipt or other proof of diversion including photos or any additional information relevant to determining compliance with the DMP.

A statement from an authorized representative of the DMP permittee signed under penalty of perjury verifying that the information submitted to the City in compliance with subparagraphs (1)-(4) above is accurate.

(d) If a DMP compliance official determines the DMP permittee has complied with the DMP, the compliance official shall direct that the permittee's performance guarantee be released within 30 days of final DMP submittal. If the compliance officer determines the DMP permittee has not complied with the DMP, the compliance officer shall calculate the percent of the permittee's failure to comply and issue a forfeiture notice to the DMP permittee based upon a sliding scale. The compliance officer shall serve the permittee pursuant to section 11.112 of this code with a statement of compliance or a notice of forfeiture. The permittee shall have 15 days from the date a notice of forfeiture is served to file an appeal of the forfeiture under section 68.517.

CITY'S RIGHT TO MONITOR, INSPECT AND ENFORCE

(a) As an additional condition of approval of a DMP under section 68.513, the DMP permittee shall consent to allow the City the right to inspect any construction or demolition site during normal business hours without notice. The DMP permittee shall have the required log available for inspection by the City inspector during normal business hours at each construction or demolition site as required to maintain under section 68.515(a).

(b) If a permittee or any of the permittee's agents or employees refuse to allow a City inspector to inspect the site or the permittee's log the City shall have the right to obtain an inspection warrant under Code of Civil Procedure sections 1822.50 et seq. and suspend the building permit. The City shall also have the right to suspend the permit if the permittee fails to maintain or have available a log required by this article, if the permittee violates any other provision of this article or if the permittee commits any other act which would be grounds for suspension of a building permit or demolition permit.

(c) If the City decides to suspend the permit under this section, the City shall issue a notice of suspension and serve the permittee under section 11.112 of this code. The suspension shall be effective 15 days from the date the City serves the notice of suspension unless the permittee appeals the notice of suspension under section 68.517, which stays the effective date of the suspension until the appeal is decided. If the City determines that any construction or demolition site is unsafe or that the permittee has knowingly failed to comply with section 68.515

the City may suspend the permit immediately and advise the permittee in the notice of suspension that the permit is suspended immediately and state the reasons for the immediate suspension. A notice of immediate suspension is also appealable under section 68.517, but an appeal does not stay the immediate suspension of the permit.

(d) It shall be unlawful for any permittee to continue to operate under a DMP in violation of subsection (c) above. A permittee who violates this section shall be guilty of a misdemeanor for each day the permittee operates in violation of subsection (c) above and upon conviction shall be fined in an amount not to exceed $500 or by imprisonment in the City Jail or both fine and imprisonment.

(e) In addition to prosecuting a permittee who violates subsection (c) above the City may seek injunction relief in any court of competent jurisdiction and civil penalties of up to $1000 a day for each day a permittee violates subsection (c).

(f) It shall also be unlawful for an applicant or a DMP permittee to knowingly provide false information to the City under this article. An applicant or permittee who knowingly provides false information under this article shall be guilty of a misdemeanor and upon conviction shall be fined in an amount not to exceed $500 or by imprisonment in the City Jail or both fine and imprisonment.

APPEALS

The following appeals may be made to the director: (1) a denial of an infeasibility exemption under section 68.514, (2) forfeiture of performance guarantee under section 68.515 or (3) a suspension of the DMP permit under section 68.516. No other appeal shall be allowed under this article. A notice of appeal shall be in writing and filed with or mailed to the director within 15 days from the date the City served any appealable notice. The postmark on any mailed notice of appeal shall be deemed to be the date appellant filed a notice of appeal by mail. The director shall appoint an independent hearing officer to hear the appeal under procedures established by the director. The decision of the hearing officer shall be final.

SEPARABILITY

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Article, or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Article or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase of this Article irrespective of the fact that one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional or invalid or effective. To this end the provisions of this Chapter are declared to be severable.

Section 3. This ordinance shall take effect and be in force thirty days after its passage, and before the expiration of fifteen days after its passage, a summary hereof shall be published once with the names of the members of the Council voting for and against it in the _____, a newspaper of general circulation published in the City of Oceanside.

Appendix H - Saving Money and Minimizing Wasted Food at Home

Reduce
Homeowners can also do much to reduce the amount of food they waste, such as working with the food already in your refrigerator and planning meals around those items. Not only will this reduce waste, but it will make your food dollars go further.
Plan your menu and shop for just those things on your menu.
Buy in quantities that you realistically need and will use. If you buy in bulk, make sure to have a way to keep the food from spoiling before you use it. An entire head of lettuce may be cheaper than bagged or the salad bar pound for pound, but if you end up throwing most of it out because you didn't use it all, you may have just thrown away those savings.
Think "what do we have to eat" instead of "what do I want to eat." Use up the food you already bought and have in the house instead of buying more. You already paid for it – so use it.

Reuse
Use up your leftovers – take leftovers from dinner to work for lunch. This can save you a bunch of money over buying your lunch every day.
Turn leftovers into a completely different meal. For example, extra cooked rice makes a great fried rice. The Internet has some excellent websites that have recipes for whatever food and ingredients you have leftover and on hand such as Love Food, Hate Waste . Go to your computer and enter "leftover recipes" on your favorite Internet browser and see all the great ideas that come up for all different kinds of leftover food. Challenge your kids to find a recipe for a leftover and have them help you make it.
Consider preserving or canning surplus fruits and vegetables – especially abundant seasonal produce. Relish Yo' Mama provides step-by-step instructions on just how to do it. Also check out Green Planet's Eat Your Trash to Improve Your Cooking for tips and tricks on recovering food waste."

Source: US EPA http://www.epa.gov/osw/conserve/materials/organics/food/fd-house.htm

A Guide for Minimizing Food Waste

You can learn the basic skills of minimizing food waste and maximizing food use. The main requirement is investing some time daily in working with the food in your refrigerator. Start by checking the refrigerator daily to see what's there. This may mean you change your basic meal-planning process from asking, "What would we like to eat today?" to "What do we have on hand to eat today?"
When you know what food you have, incorporate it into the day's menu. Add cooked meats and vegetables to soups, casseroles, quiches or omelets. Use raw vegetables or fruits in salads. If you cannot use up the food immediately, you can freeze such items as cooked meat or vegetables or broth in a large freezer container and use it later. Remember, daily attention is the key. Get into the habit of making a regular check of your refrigerator to get those leftovers used up today! Every time you find a way to use up an item in your refrigerator, give yourself a pat on the back. You're starting to reap benefits for your household and your food budget. Think of yourself as a food investment executive, a director of food resource management, or a miracle-maker that can

look into cupboards, refrigerators and freezers and see possibilities for creative food combinations that you might not have seen before.
Equally important to minimizing food waste is preventing leftovers. Many times leftovers occur because you prepared too much food. Try preparing less per meal, serving smaller portions, or allowing individuals to choose the size of their portion. Another way to prevent leftovers is to buy fewer varieties of fresh food per shopping trip and make an effort to use up existing supplies of perishable foods before buying additional ones.
Using leftovers need not be a dull or grim activity, but one that offers rewards for both cook and household members. As you grow in Use-It-Up skills, you'll increase your satisfaction in the results of your efforts. You'll be proud to have pulled together a meal from what had appeared to be a meaningless jumble of leftovers. You'll enjoy the victory of having eked out another meal when food supplies and budget were nearly gone. You'll identify with prudent cooks who give their households a "free meal" through their wise choices. And you'll join the ranks of cooks who down through the years have stretched their feed to feed more meals to more people by their careful planning, ingenuity, and Use-It-Up Cooking.

Source: *The Use-It-Up Cookbook*: A Guide for Minimizing Food Waste,
Lois Carlson Willand

Tips to Minimize Food Waste

1. Keep the fridge clean and clutter free. By knowing where everything is, food is not hidden or forgotten. I have zones in the fridge for prepared food (ready to eat, such as leftovers), dairy and eggs, fruits and vegetables, and for ingredient that need to be used up (half used cans of coconut milk or tomato, or a partial block of cheese, say). Seeing these grouped together triggers the reminder to eat them up.

2. Plan meals. I spend 30 seconds glancing at the food I have on hand in the fridge and pantry (and that needs to be used up quickly) and fashioning a menu for the day's dinner.

3. Keep some fridge (and pantry and freezer)- cleaning recipes handy. Soup and stew is a good vehicle for all sorts of ingredients you may want to use up.

4. Be careful while trying "risky" recipes. It is incredibly wasteful to try a new recipe and throw out the whole thing either because you messed up while making it or because it tasted awful. Try to choose recipes where you can predict that you will like them (and that you can make them properly.)

5. Consolidate ingredients. The more ingredients you stuff into your kitchen, the higher the likelihood that they will expire or spoil before they are used up, or you will move from that home and trash the lot.

6. Pause while shopping. The potential for food waste begins the second we buy the food. Pause right there at the store and really ask- do I need this? Will I use it?

7. Less than perfect food is still 100% OK to use. You can stir-fry wilted greens and they still taste fine. You can cut the rotting spot off a tomato and still cook the rest. Dried out rice can be revived with a splash of water and a few minutes in a microwave oven or steamer.

More shared tips from site visitors:

Make a weekly meal planner the day before you go food shopping.

Shop 2-3 times a week.

If you've cooked too much food, freeze the excess.

Quit the warehouse shopping habit.

Recycle leftovers into new dishes, like making vegetable cutlets with them.

Feed veggie scraps to your free range chickens and meat scraps to your dogs!

Those little packets of ketchup and sugar in restaurants- use them at home or return them as soon as you are seated so they are not wasted.

To keep vegetables from rotting in the crisper, chop them and freeze them while they are still fresh.

Use the 5 minute rule to control impulse buying- When something new and exciting catches your eye while shopping for food, put it down and come back to it after finishing your shopping.

Source: Excerpts from the blog, One Hot Stove

http://onehotstove.blogspot.com/2010/12/12-tips-to-minimize-food-waste.html

Appendix I - Saving Money and Minimizing Waste for Restaurants and Businesses that Serve Food

Source Reduction Methods

Following are some source reduction tips for Oceanside restaurants, grocery stores, cafeterias, caterers and food service companies as compiled from the CalRecycle and other sources. Some of these practices may also offer homeowners and non-food business methods to save money and reduce waste.

Purchasing

- Buy lettuce precut during those times of the year when the pre-cut cost is equal to (or less than) the cost of the bulk product

- Reduce packaging by buying meats in bulk or uncut form and cut to size

- Also to reduce packaging, buy shelled eggs in bulk if egg usage exceeds three or more cases per week

- Check produce deliveries carefully for rotten or damaged product, and return any substandard goods

- Suppliers can be asked to take back shipping boxes for reuse or recycling and told to keep you informed about new and existing products that are packaged in ways which can reduce waste

- Spending a little more to purchase the most durable equipment and janitorial supplies will reduce waste and save money

- Purchase paper products made from recycled materials

- Compostable paper from recycled materials is a better option than plastic for take-out bags, plates, containers, and cups

Service Areas and Practices

- Serve beverages from a gun or dispenser, buy bar mixes in concentrate form, and buy milk in 5-gallon dispenser boxes

- Use health department-approved, refillable condiment dispensers instead of individual packets. Buy shelf-stable food supplies in bulk when sales volume and storage space allows

- Reusable coasters create less waste than paper napkins or coasters when serving beverages

- Use reusable table linen and dinnerware

- Washable ceramic dishes and cups, glass and silverware are better choices than plastic

- Condiments should be distributed from behind the counter rather than offered as self-service

- Straws served from health department-approved dispensers, rather than pre-wrapped, reduce waste

- Use of unnecessary extra packaging for take-out foods should be minimized. Minimal packaging, or preferably, none at all, should be used for eat-in foods

- Dining room trash should be checked for discarded trays and flatware before being throwing out

- If beverages in cans or bottles are served, a recycling bin should be placed in the dining area

Storage and Refrigeration

- Rotate perishable stock at every delivery to minimize waste due to spoilage

- Clean coolers and freezers regularly to ensure that food has not fallen behind the shelving and spoiled

- Arrange refrigerated and dry storage areas to facilitate easy product access and rotation

- Store raw vegetables and other perishables in reusable airtight containers to prevent unnecessary dehydration and spoilage

- Freezer products can be wrapped tightly, labeled, and dated to ensure they are used in a timely fashion and don't develop freezer burn

Leftover or Discarded Food

- Some unserved foods are suitable for donation to a local food bank

- Vegetable and meat trimmings can be used for soup stock

- A rendering service should be used for waste grease, fat, or used cooking oil • Food that can't be rendered, donated to a food bank or isn't suitable for animal feed should be composted

Kitchen and Preparation

- Rehydrate vegetables (e.g., celery, lettuce, carrots, broccoli, etc.) that have wilted by trimming off the very bottom part of the stalk and immersing in warm water (100°F.) for 15 to 20 minutes

- Use hourly or daily production charts to minimize over prepping and unnecessary waste

- Whenever possible, prepare foods to order

- Adjust the size of meal portions if they are consistently being returned unfinished

- Rubber mats placed around bus and dishwashing stations can reduce china and glass breakage

Cleaning and Facility Maintenance

- Store and handle unwrapped paper supplies to prevent the products from inadvertently falling on the floor

- Cloth towels should be used for cleaning, rather than the paper

- Plastic trash can liners made of recycled HDPE, rather than those made of LDPE or LLDPE, contain less raw materials, work equally well for most uses, and generally cost less

- Cleaning supplies are best purchased in concentrated form

- Multipurpose cleaners suitable for all types of surfaces create less waste than those that are job specific. Non-hazardous, non-toxic cleaners are best

- Reusable hats for kitchen employees will eliminate waste from disposable paper ones

- Empty plastic pails or buckets can be donated to schools, nurseries, churches, customers, or employees

- Old uniforms can be donated to thrift shops

Employees and Customers

- Incentive programs can be created to reward staff for reducing breakage of china and glass

- Employees can use permanent-ware mugs or cups for their drinks

- Employees should be asked for input and assistance on what can be done to reduce waste, and rewarded for good ideas

- Educate customers and advertise waste reduction programs by posting signs highlighting efforts

- Customers can be offered a discount if they bring their own mugs, containers, or bags

Source: "A Review of Community Based Resource Recovery Projects and Potential Methods and Strategies for Development and Implementation of an Intensive Organic Residual Diversion and Composting Program for the City of Chula Vista," Author and researcher Richard Flammer, Hidden Resources, under contract by the City of Chula Vista, California, May 15, 2008

Appendix J – List of Food Banks and Shelters in Oceanside and San Diego County Region

Feeding America San Diego
9455 Waples Street, Suite 135
San Diego, CA 92121
www.feedingamericasd.org
Tim Ney, Chief Operations Officer
tney@feedingamerica.org
452-3663

North County Community Services
North County's Food Bank
680 Ranchero's Drive, Suite 100
San Marcos, CA 92069
760-761-1140
www.sdnccs.org
Michael Lawson, Director
mlawson@sdnccs.org
(760) 471-5483

Interfaith Community Services
Coastal Service Center
2195 Oceanside Boulevard
Oceanside, CA 92054
www.interfaithservices.org
Veronica Llamas, Lead Case Manager
vllamas@interfaithservices.org
(760) 721-2117

Bread of Life Rescue Mission
1919 Apple Street, Suite I
Oceanside, CA 92049
www.bolrescue.org
Steve Bassett, Pastor/Executive Director
pstrsteve777@juno.com
(760) 722-0800

Brother Benno's
3260 Production Avenue
Oceanside, CA 92058 USA
www.brotherbenno.org
Liz Lindle, Volunteer Grant Writer
elizabethwindle@att.net
(760) 439-1244

San Diego Humane Society and ASPCA

572 Airport Road and
2905 San Luis Rey Road
Oceanside, CA 92058
www.sdhumane.org
Jenny Ludovissy, Development Assistant
(760) 757-4357 x. 2276

Donate Don't Dump
P.O. Box 236034
Encinitas, CA 92023-6034
Donate Don't Dump.org
Gabrielle, Camille and Lisa Posard
Info@DonateDontDump.com
(760) 815-0667

San Diego Food Bank
9850 Distribution Avenue
San Diego, California 92121
www.sandiegofoodbank.org
J. Scofield Hage, Executive Director
jshage@sandiegofoodbank.org
(858) 527-1419

Appendix K – List of Community Gardens

Ivey Ranch Park Association
110 Rancho Del Oro Drive
Oceanside, CA 92057
www.iveyranch.com
Tonya Danielly - Executive Director
iveyranch@yahoo.com
(760) 722-4839

Kelly Street Cooperative Garden
North Coast United Methodist Church
1501 Kelly Street, Oceanside, CA
www.northcoastumc.org
Jan DesRosiers, Church volunteer and Project Coordinator
(760) 439-4099

Eastside Community Garden
Pier View & Weltzel Street
Oceanside, California
Contact: Concha H. Greene
(760) 439-9831

Crown Heights Community Garden
Division Street and Garfield
Oceanside, CA

Appendix L - "Local Governments—You Can Divert Waste and Help Fight Hunger," Food Banking Tips from CalRecycle

"You, as a local government representative, can help promote food banking and food rescue programs in many ways. Some examples are:

- Identify the food-generating businesses in your area. Familiarize yourself with issues and concerns faced by these businesses, such as liability and tax benefits.
- Market your local food bank as part of your recycling or waste management educational campaign.
- Identify creative ways to disseminate food bank information to potential donors. For example, develop an agreement with the county health inspectors. As they inspect restaurants, caterers, and cafeterias, they could hand out brochures explaining the services offered by their local food rescue programs. This literature can also explain liability protection and potential tax benefits.
- Implement a waste management grant program to fund food banking proposals.
- Invite food bank representatives to speak at government meetings.
- Promote food banking through community venues such as the chamber of commerce and other local community groups.
- Identify food-generating businesses and target them for outreach materials.
- Target your local government buildings, correctional institutions and schools to implement pilot food donation programs.
- Establish a policy to encourage or require government-sponsored events or institutions (such as schools, correctional institutions or corporate cafeterias) to donate edible food.
- Create an awards program to recognize generous businesses that donate food.
- Successful local government and food bank partnerships

Local waste management departments and food banks create excellent partners. Diverting food that normally would be landfilled to feed hungry people meets both waste management and food bank goals.

The City and County of San Francisco's Recycling Program offers grant funding for waste diversion projects. In 1996, funding was awarded to the San Francisco Food Bank (SFFB) to create an improved produce redistribution program. The SFFB purchased a new truck and hired a driver to pick up produce at the San Francisco Produce Terminal five days per week.

The program was so successful that the SFFB has been awarded grants every year since 1996 and has purchased a forklift, a sorter/conveyor system, and an additional truck for donor pickups. The amount of produce redistributed went from approximately 877,000 pounds prior to 1996 to approximately 2.5 million pounds in 1999.
Central Contra Costa Solid Waste Management Authority also provided funding to a local food bank. The Contra Costa Food Bank (CCFB) received $5,000 to augment outreach efforts for its prepared and perishable food program. This program focuses on picking up leftover food from corporate cafeterias, hospital dining rooms, caterers, hotels, schools, and selected restaurants in the county.

The majority of the funding paid for the development and printing of a brochure to target potential business donors. Seventy targeted businesses received a direct mailing of this brochure. CCFB staff will also conduct site visits and follow-up at these businesses. CCFB also partnered with the Clean Water Program, which conducts annual inspections of all restaurants in the county, to help distribute the brochure.

Schools and hospitals also donate to food rescue programs. The Salvation Army in the City of Monterey, California collects leftover meals from St. Catalina School and Monterey Community Hospital in Monterey. An average of 40 meals per day is collected from both locations. The Salvation Army feeds about 100 meals per day to the homeless in Monterey County."

Source: CalRecycle, Food Scrap Management, Local Government, http://www.calrecycle.ca.gov/organics/food/donation/LocalGov.htm

Sample Text for a Flyer:

"Benefits

Save money, enhance your public image and help your community!

Instead of throwing away your left over, outdated or slightly damaged (but still edible) food, donate it to your local food bank! As an owner or manager of a business, you can:
Save money

Don't use expensive dumpster space for edible food.

Instead of paying for waste hauling services for edible food, food banks can pick up food for FREE.

Instead of using up expensive shelf space for those items that just aren't selling, but are perfectly edible, you can donate the food to make room for new items.

Enhance your public image

Everyone appreciates a good Samaritan. By donating edible food, you prove that you're a money-wise and caring member of the business community.

Provide community support

Local patrons know that your business is committed to helping those in need.
Claim tax benefits

Businesses may write off food donations on their tax forms (consult a tax advisor for details).

Be protected
The Bill Emerson Good Samaritan Food Donation Act (Public Law 104-210) (see full text below) protects those who donate food in good faith from liability."

Source: CalRecycle, Food Scrap Management, Restaurants and Grocery Stores, http://www.calrecycle.ca.gov/organics/food/donation/Business.htm

Appendix M – Survey Questions for Interviewing Shelters, Food Banks and Generators

Survey Questions:

For Shelters

Do use accept food donations?

Are you currently getting them?

Occasionally, or on a regular basis?

Do you need more?

For many meals?

Or what type of food is accepted? Canned/boxed? Pre-cooked, hot food? Fruits and vegetables?

Any other donations desired? Clothes, blankets, soaps and shampoos, etc.?

Do you have the resources to pick-up, or would the donations need to be delivered?

Do you need volunteers?

Who is best point of contact?

For Food Banks

Do you need more donated food?

What volume?

What type?

Do you need other donations?

What type?

Do you have the resources to pick-up, or would the donations need to be delivered?

Do you need volunteers?

Who is best point of contact?

For Generators

Do you currently donate food to a shelter or food bank?

Do you have any type of food waste minimization program in place?

If yes, what is it, or what sort of methods do you use?

Do you have excess food?

How much, how often, and what type?

Would you be willing to donate it?

If not, is it because of a company policy or some other reason?

Are you familiar with the Good Samaritan Act?

Do you have the resources to deliver, or would the donations need to be picked up?

Do you need volunteers?

Who is best point of contact?

Appendix N – Addressing Liability Concerns from Businesses and Organizations with Potential to Donate Food, including Complete Text of The Bill Emerson Food Donation Act

From Feeding America:

"Millions of pound of food and groceries go to waste each year. To encourage companies and organizations to donate healthy food that would otherwise go to waste, they are protected from criminal and civil liability under the Good Samaritan Food Donation Act.

The Federal Bill Emerson Good Samaritan Food Donation Act

On October 1, 1996, President Clinton signed this act to encourage donation of food and grocery products to non-profit organizations for distribution to individuals in need. This law:

• Protects you from liability when you donate to a non-profit organization;

• Protects you from civil and criminal liability should the product donated in good faith later cause harm to the recipient;

• Standardizes donor liability exposure. You or your legal counsel do not need to investigate liability laws in 50 states; and

• Sets a floor of "gross negligence" or intentional misconduct for persons who donate grocery products.

According to the new law, gross negligence is defined as "voluntary and conscious conduct by a person with knowledge (at the time of conduct) that the conductis likely to be harmful to the health or well-being of another person."

The complete text of the bill follows:
The Bill Emerson Food Donation Act
One Hundred Fourth Congress of the United States of America
At the Second Session
Begun and held at the City of Washington on Wednesday, the third day of January, one thousand nine hundred and ninety-six.
An Act
To encourage the donation of food and grocery products to nonprofit organizations for distribution to needy individuals by giving the Model Good Samaritan Food Donation Act the full force and effect of law.
Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,
Section 1. CONVERSION TO PERMANENT LAW OD MODEL GOOD SAMARITAN FOOD DONATION ACT AND TRANSFER OF THAT ACT TO CHILD NUTRITION ACT OF 1966.

(a) Conversion to Permanent Law. -- Title IV of the National and Community Service Act of 1990 is amended --

1. by striking the title heading and sections 401 and 403 (42 U.S.C. 12671 and 12673); and
2. in section 402 (42 U.S.C. 12672) --

(A) in the section heading, by striking "model" and inserting "bill emerson"

(B) in subsection (a), by striking "Good Samaritan" and inserting "Bill Emerson Good Samaritan:"

(C) in subsection (b)(7), to read as follows:

"(7) GROSS NEGLIGENCE. -- The term 'gross negligence' means voluntary and conscious conduct (including a failure to act) by a person who, at the time of the conduct, knew that the conduct was likely to be harmful to the health or well-being of another person.";

(D) by striking subsection (c) and inserting the following:

"(c) LIABILITY FOR DAMAGES FROM DONATED FOOD AND GROCERY PRODUCTS.

"(1) LIABILITY OF PERSON OR GLEANER. -- A person or gleaner shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of apparently wholesome food or an apparently fit grocery product that the person or gleaner donates in good faith to a nonprofit organization for ultimate distribution to needy individuals.

"(2) LIABILITY OF NONPROFIT ORGANIZATION. -- A nonprofit organization shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of apparently wholesome food or an apparently fit grocery product that the nonprofit organization received as a donation in good faith from a person or gleaner for ultimate distribution to needy individuals.

"(3) EXCEPTION. -- Paragraphs (1) and (2) shall not apply to an injury to or death of an ultimate user or recipient of the food or grocery product that results from an act or omission of the person, gleaner or nonprofit organization, as applicable, constituting gross negligence or intentional misconduct."; and

(E) in subsection (f), by adding at the end the following: "Nothing in this section shall be construed to supersede State or local health regulations.".

(b) TRANSFER TO CHILD NUTRITION ACT OF 1966. -- Section 402 of the National and Community Service Act of 1990 (42 U.S.C. 12762) (as amended by subsection (a))

1. is transferred from the National and Community Service Act of 1990 to the Child Nutrition Act of 1966;
2. is redesignated as section 22 of the Child Nutrition Act of 1966; and
3. is added at the end of such Act.

(c) CONFORMING AMENDMENT. -- The table of contents for the National and Community Service Act of 1990 is amended by striking the items relating to title IV.

Source: http://feedingamerica.org/get-involved/corporate-opportunities/become-a-partner/become-a-product-partner/protecting-our-food-partners.aspx

Appendix O - San Diego County Humane Society and SPCA Wish List

Food/Treats:
• Cat and Dog Treats: – Bonito flake cat treats – Dog biscuits (e.g. Milk Bones) – Natural Balance rolls – Soft-type dog and cat treats – Esbilac Puppy Milk Replacer (powdered)
• For Behavior Training and Veterinary Use: – Canned chicken – Cheez Whiz – Meat-flavored baby food
• For Kitten Nursery: – KMR Kitten Milk Replacer (powdered) – Royal Canin dry kitten food
• Purina One dog food (canned) • Purina One cat food (canned)

Toys/Enrichment Items:
• New cat/kitten toys and scratchers • Plush dog toys • Dog Chew Toys: – Nylabones – Pig ears – Pressed rawhide bones – Bully sticks
• Plastic and large inflatable children's pool

Other:
• Baby blankets • Bathmats with rubber backings • Cat litter (clumping and non-clumping)
• Disposable plastic feeding trays* • Disposable puppy potty pads • Dog and cat grooming brushes and combs • Dog houses • Heating pads (electrical, non-automatic shutoff type) • Grooming tool kit*
• Facial tissue (white) • New, unused leashes, harnesses, and collars (martingale or flat collars only)
• Overhead trolley system for dogs • Snuggle Safe pet heating discs* • 5' shower pan liner

Miscellaneous/Other:
• AA, AAA and D batteries • Assorted utensils • Bleach • Cardstock, various weights and colors
• Compressed air cans
• Dawn dish soap • Defibrillator* • Digital currency counter* • Disinfecting wipes • Double-sided adhesive mounting squares • EZ Up/Quik Shade canopy tents* • Folding chairs
• General office supplies (see website for details) • Lint rollers and refills • Paper towels • Party/non-denominational holiday decorations (new) • Portable GPS Navigation system* • Pre-paid cell phones
• Reflective safety vests • Tall one-door commercial merchandise refrigerator* • FRS two-way radios (cordless, with chargers)* • Plastic trash bags (45 gallon or larger) • Ziploc bags

Gift Certificates/Cards to:
• Grocery stores • IKEA • Michaels, • Office Depot • Petco • Target, • local gas stations, restaurants, movie theaters and bookstores

*Please call for more details

Appendix P - Extended Producer Responsibility Resolution

RESOLUTION NO. _____
RESOLUTION OF THE CITY OF OCEANSIDE
SUPPORTING EXTENDED PRODUCER RESPONSIBILITY

WHEREAS, approximately 167,000 tons of discarded materials and products are currently sent to disposal from our community on an annual basis at a cost of $_____ per ton; and

WHEREAS, on February 8, 2006 California's Universal Waste Rule (CCR, Title 22, Division 4.5, Chapter 23) became effective; and

WHEREAS, the Universal Waste Rule bans landfill disposal of certain products that are deemed hazardous, including household batteries, fluorescent bulbs and tubes, thermostats and other items that contain mercury, as well as electronic devices such as video cassette recorders, microwave ovens, cellular phones, cordless phones, printers, and radios; and

WHEREAS, it is anticipated that the list of Universal and other waste products determined to be hazardous and therefore banned from landfills will continue to grow as demonstrated by the ban of treated wood effective January 2007 and sharps in September 2008; and

WHEREAS, state policies currently make local governments responsible for achieving waste diversion goals and enforcing product disposal bans, both of which are unfunded mandates; and

WHEREAS, Universal Waste management costs are currently paid by taxpayers and rate payers and are expected to increase substantially in the short term unless policy changes are made; and

WHEREAS, local governments do not have the resources to adequately address the rising volume of discarded products; and

WHEREAS, costs paid by local governments to manage products are in effect subsidies to the producers of hazardous products and products designed for disposal; and

WHEREAS, costs paid in (year) for managing household batteries was equivalent to over $_____ per ton and the costs paid by the operator of the (Name) Transfer Station to properly dispose of fluorescent tubes was over $_____ per ton and the cost to manage (Name sharps or other products as desired); and

WHEREAS, if the City of Oceanside were able to collect all of the batteries and fluorescent tubes generated in the City of Oceanside, such a service cost would more than all of the other current household hazardous waste programs combined; and

WHEREAS, the City Council of the City of Oceanside supports statewide efforts to have producers share in the responsibility for Universal Waste products and other product waste management costs; and

WHEREAS, there are significant environmental and human health impacts associated with improper management of Universal Waste, sharps, pharmaceuticals, and other products; and

WHEREAS, Extended Producer Responsibility (EPR) is a policy approach in which producers assume financial responsibility for management of waste products and which has been shown to be effective; and

WHEREAS, when products are reused or recycled responsibly, and when health and environmental costs are included in the product price, there is an incentive to design products that are more durable, easier to repair and recycle, and less toxic; and

WHEREAS, EPR framework legislation establishes transparent and fair principles and procedures for applying EPR to categories of products for which improved design and management infrastructure is in the public interest; and

WHEREAS, the California Product Stewardship Council (CPSC) is an organization of California local governments working to speak with one voice in promoting transparent and fair EPR systems in California; and

WHEREAS, the City of Oceanside wishes to incorporate EPR policies into the City's and County's product procurement practices to reduce costs and protect public health and the environment; and

WHEREAS, in January 2008 the California Integrated Waste Management Board, now known as CalRecycle, adopted a Framework for an EPR System in California; and

WHEREAS, in July 2008 the National Association of Counties adopted a resolution in support of a framework approach to EPR, November 2009 the National League of Cities adopted EPR policy, and June 2010 the US Conference of Mayors adopted a resolution in support of EPR; and

NOW, THEREFORE BE IT RESOLVED BY THE COUNCIL OF THE CITY OF OCEANSIDE that by adoption of this Resolution, the City of Oceanside urges the CalRecycle to continue taking timely action to implement the Framework for an EPR System in California to manage problematic products, and to urge the Department of Toxic Substances Control to implement the Green Chemistry initiative to manage Universal and other toxic products; and

BE IT FURTHER RESOLVED, that the Council of the City of Oceanside urges the California Legislature to enact product specific and framework EPR legislation which will give producers the incentive to design products to make them less toxic and easier to reuse and recycle; and

BE IT FURTHER RESOLVED, that the staff of the City of Oceanside be authorized to send letters to the League of CA Cities, CalRecycle, and the State legislature and to use other advocacy methods to urge support for EPR Framework legislation and related regulations when deemed appropriate; and

BE IT FURTHER RESOLVED, that the Mayor of the City of Oceanside be authorized to sign the California Product Stewardship Council (CPSC) Pledge of Support and participate by contributing $1500 to CPSC to educate and advocate for EPR policies and programs; and

BE IT FURTHER RESOLVED, that the City of Oceanside encourages all manufacturers to share in the responsibility for eliminating waste through minimizing excess packaging, designing products for durability, reusability and the ability to be recycled; using recycled materials in the manufacture of new products; and providing financial support for collection, processing, recycling, or disposal of used materials; and communicating with haulers and local governments about end of life management; and

BE IT FURTHER RESOLVED, that the City of Oceanside and its member agencies develop producer responsibility policies such as leasing products rather than purchasing them and requiring producers to offer less toxic alternatives and to take responsibility for collecting and recycling their products and the end of their useful life.

PASSED AND ADOPTED by the City Council of the City of Oceanside, State of California on _____by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Signed: _____ Date: (mo/day/year)

_____
(Name), Mayor

ATTEST:

_____
(Name), City Clerk

Source: Model Resolution from CA Product Stewardship Council: http://www.calpsc.org/policies/local/index.html. Also there is a Model Staff Report to go with this resolution at that same URL.

Appendix Q - Sample Plastic Bag Resolution

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF OCEANSIDE, CALIFORNIA REGULATING RETAIL ESTABLISHMENTS PROVISION OF SINGLE-USE CARRY-OUT BAGS

THE OCEANSIDE CITY COUNCIL ORDAINS AS FOLLOWS:

SECTION 1. FINDINGS.

WHEREAS, the use of all single-use shopping bags (plastic, paper, biodegradable) has severe environmental impacts, including greenhouse gas (GHG) emissions, litter, harm to wildlife, ground-level ozone formation, atmospheric acidification, water consumption and solid waste generation; and
WHEREAS, there are approximately _____ retail establishments in the City of Oceanside as defined herein, most of which provide single-use, disposable carry-out bags to their customers; and
WHEREAS, many of these single-use carry-out bags are made from plastic or other material that does not readily decompose; and
WHEREAS, approximately Nineteen Billion (19,000,000,000) single-use plastic bags are used annually in California but less than 5% are recycled; and
WHEREAS, numerous studies have documented the prevalence of single-use plastic carry-out bags littering the environment, blocking storm drains and fouling beaches; and
WHEREAS, the City of Oceanside taxpayers must bear the brunt of the clean-up costs of this litter; and
WHEREAS, plastic bags are a significant source of marine debris and are hazardous to marine animals and birds which often confuse single-use plastic carry-out bags for a source of food resulting in injury and death to birds and marine animals; and
WHEREAS, of all single-use bags, single-use plastic bags have the greatest impacts on litter and marine life; and
WHEREAS, the use of single-use paper bags result in greater (GHG) emissions, atmospheric acidification, water consumption, and ozone production than single-use plastic bags; and
WHEREAS, from an overall environmental and economic perspective, the best alternative to single-use plastic and paper carry-out bags is a shift to reusable bags; and
WHEREAS, there are several alternatives to single-use carry-out bags readily available; and
WHEREAS, an important goal of the City of Oceanside is to procure and use sustainable products and services; and
WHEREAS, it is the desire of City of Oceanside to conserve resources, reduce the amount of GHG emissions, waste, litter and marine pollution and to protect the public health and

welfare as well as to protect wildlife, all of which activities increase the quality of life for the [name of jurisdiction] residents and visitors; and
WHEREAS, studies document that banning plastic bags and placing fees on paper bags will dramatically reduce the use of both types of bags.

SECTION 2. Chapter __is hereby added to the City of Oceanside Code to read as follows:

CHAPTER __ DISPOSABLE BAG REDUCTION ORDINANCE

An Ordinance for the Chapter 1.1 DISPOSABLE BAG REDUCTION ORDINANCE for the City of Oceanside relating to regulating the use of plastic carryout bags and recyclable paper carryout bags and promoting the use of reusable bags within the City limits.

The City Council of Oceanside ordains as follows:

SECTION 2. Chapter 1.1 reads as follows:

1.1.010 Definitions.

The following definitions apply to this Chapter:

A. "Customer" means any person purchasing goods from a store.

B. "Operator" means the person in control of, or having the responsibility for, the operation of a store, which may include, but is not limited to, the owner of the store.

C. "Person" means any natural person, firm, corporation, partnership, or other organization or group however organized.

D. "Plastic carryout bag" means any bag made predominantly of plastic derived from either petroleum or a biologically-based source, such as corn or other plant sources, which is provided to a customer at the point of sale. "Plastic carryout bag" includes compostable and biodegradable bags but does not include reusable bags, produce bags, or product bags.

E. "Postconsumer recycled material" means a material that would otherwise be destined for solid waste disposal, having completed its intended end use and product life cycle. "Postconsumer recycled material" does not include materials and by-products generated from, and commonly reused within, an original manufacturing and fabrication process.

F. "Produce bag" or "product bag" means any bag without handles used exclusively to carry produce, meats, or other food items to the point of sale inside a store or to prevent such food items from coming into direct contact with other purchased items.

G. "Recyclable" means material that can be sorted, cleansed, and reconstituted using available recycling collection programs for the purpose of using the altered form in the manufacture of a new product. "Recycling" does not include burning, incinerating, converting, or otherwise thermally destroying solid waste.

H. "Recyclable paper carryout bag" means a paper bag that meets all of the following requirements: (1) contains no old growth fiber, (2) is one hundred percent (100%) recyclable overall and contains a minimum of forty percent (40%) postconsumer recycled material; (3) is capable of composting, consistent with the timeline and specifications of the American Society of Testing and Materials (ASTM) Standard D6400; (4) is accepted for recycling in curbside programs in the County; (5) has printed on the bag the name of the manufacturer, the location (country) where the bag was manufactured, and the percentage of postconsumer recycled material used; and (6) displays the word "Recyclable" in a highly visible manner on the outside of the bag.

I. "Reusable bag" means a bag with handles that is specifically designed and manufactured for multiple reuse and meets all of the following requirements: (1) has a minimum lifetime of 125 uses, which for purposes of this subsection, means the capability of carrying a minimum of 22 pounds 125 times over a distance of at least 175 feet; (2) has a minimum volume of 15 liters; (3) is machine washable; (4) does not contain lead, cadmium, or any other heavy metal in toxic amounts; (5) has printed on the bag, or on a tag that is permanently affixed to the bag, the name of the manufacturer, the location (country) where the bag was manufactured, a statement that the bag does not contain lead, cadmium, or any other heavy metal in toxic amounts, and the percentage of postconsumer recycled material used, if any; and (6) if made of plastic, is a minimum of at least 2.25 mils thick.

J. "Store" means any of the following retail establishments located within the City of Oceanside:

(1) A full-line, self-service retail store with gross annual sales of two millon dollars ($2,000,000), or more, that sells a line of dry grocery, canned goods, or nonfood items and some perishable items;

(2) A store of at least 10,000 square feet of retail space that generates sales or use tax pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law (Part 1.5 (commencing with Section 7200) of Division 2 of the Revenue and Taxation Code) and that has a pharmacy licensed pursuant to Chapter 9 (commencing with Section 4000) of Division 2 of the Business and Professions Code; or (3) A drug store, pharmacy, supermarket, grocery store, convenience food store, foodmart, or other entity engaged in the retail sale of a limited line of goods that includes milk, bread, soda, and snack foods, including those stores with a Type 20 or 21 license issued by the Department of Alcoholic Beverage Control.

1.1.020 Plastic carrvout bags prohibited.

A. No store shall provide to any customer a plastic carryout bag.

B. This prohibition applies to bags provided for the purpose of carrying away goods from the point of sale and does not apply to produce bags or product bags.

1.1.030 Permitted bags.

All stores shall provide or make available to a customer only recyclable paper carryout bags or reusable bags for the purpose of carrying away goods or other materials from the point of sale, subject to the terms of this Chapter. Nothing in this Chapter prohibits customers from using bags of any type that they bring to the store themselves or from carrying away goods that are not placed in a bag, in lieu of using bags provided by the store.

1.1.040 Regulation of recyclable paper carryout bags.

A. Any store that provides a recyclable paper carryout bag to a customer must charge the customer 10 cents ($0.10) for each bag provided, except as otherwise provided in this Chapter.

B. No store shall rebate or otherwise reimburse a customer any portion of the 10-cent ($0.10) charge required in Subsection A, except as otherwise provided in this Chapter.

C. All stores must indicate on the customer receipt the number of recyclable paper carryout bags provided and the total amount charged for the bags.

D. All monies collected by a store under this Chapter wil be retained by the store and may be used only for any of the following purposes: (1) costs associated with complying with the requirements of this Chapter, (2) actual costs of providing recyclable paper carryout bags, or (3) costs associated with a store's educational materials or education campaign encouraging the use of reusable bags, if any.

E. All stores must report to the Solid Waste and Recycling Division, on a quarterly basis, the total number of recyclable paper carryout bags provided, the total amount of monies collected for providing recyclable paper carryout bags, and a summary of any efforts a store has undertaken to promote the use of reusable bags by customers in the prior quarter. Such reporting must be done on a form prescribed by the Solid Waste and Recycling Division, and must be signed by a responsible agent or officer of the store confirming that the information provided on the form is accurate and complete. For the periods from January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31, all quarterly reporting must be submitted no later than 30 days after the end of each quarter.

F. If the reporting required in Subsection E is not timely submitted by a store, such store shall be subject to the fines set forth in Section 1.1.080.

1.1.050 Use of reusable bags.

A. All stores must provide reusable bags to customers, either for sale or at no charge.

B. Each store is strongly encouraged to educate its staff to promote reusable bags and to post signs encouraging customers to use reusable bags.

1.1.060 Exempt customers.

All stores must provide at the point of sale, free of charge, either reusable bags or recyclable paper carryout bags or both, at the store's option, to any customer participating either in the California Special Supplemental Food Program for Women, Infants, and Children pursuant to Article 2 (commencing with Section 123275) of Chapter 1 of Part 2 of Division 106 of the Health and Safety Code or in the Supplemental Food Program pursuant to Chapter 10 (commencing with Section 15500) of Part 3 of Division 9 of the Welfare and Institutions Code.

1.1.070 Operative date.

This Chapter shall become operative on _____, for stores defined in Subsections J(1) and J(2) of Section 1.1.010. For stores defined in Subsection J(3) of Section 1.1.010, this Chapter shall become operative six months later.

1.1.080 Enforcement and violation-penalty.

A. The Department of Water Utilities has primary responsibility for enforcement of this Chapter. The Director of Water Utilities is authorized to promulgate regulations and to take any and all other actions reasonable and necessary to enforce this Chapter, including, but not limited to, investigating violations, issuing fines and entering the premises of any store during business hours. The Director of the Department of Agricultural Commissioner/Weights and Measures and the Director of Public Health may assist with this enforcement responsibility by entering the premises of a store as part of their regular inspection functions and reporting any alleged violations to the Director of Water Utilities.

B. If the Director of Water Utilities determines that a violation of this Chapter has occurred, he/she will issue a written warning notice to the operator of a store that a violation has occurred and the potential penalties that will apply for future violations.

C. Any store that violates or fails to comply with any of the requirements of this Chapter after a written warning notice has been issued for that violation shall be guilty of an infraction.

D. If a store has subsequent violations of this Chapter that are similar in kind to the violation addressed in a written warning notice, the following penalties will be imposed and shall be payable by the operator of the store:

(1) A fine not exceeding one hundred dollars ($100.00) for the first violation after the written warning notice is given;
(2) A fine not exceeding two hundred dollars ($200.00) for the second violation after the written warning notice is given; or
(3) A fine not exceeding five hundred dollars ($500.00) for the third and any subsequent violations after the written warning notice is given.

E. A fine shall be imposed for each day a violation occurs or is allowed to continue.

F. All fines collected pursuant to this Chapter shall be deposited in the Solid Waste

Management Fund of the Department of Water Utilities to assist the department with its costs of implementing and enforcing the requirements of this Chapter.

G. Any store operator who receives a written warning notice or fine may request an administrative review of the accuracy of the determination or the propriety of any fine issued, by filing a written notice of appeal with the Director of Water Utilities no later than 30 days after receipt of a written warning notice or fine, as applicable. The notice of appeal must include all facts supporting the appeal and any statements and evidence, including copies of all written documentation and a list of any witnesses, that the appellant wishes to be considered in connection with the appeal. The appeal will be heard by a hearing officer designated by the Director of Water Utilities. The hearing officer will conduct a hearing concerning the appeal within 45 days from the date that the notice of appeal is filed, or on a later date if agreed upon by the appellant and the City, and will give the appellant 10 days prior written notice of the date of the hearing. The hearing officer may sustain, rescind, or modify the written warning notice or fine, as applicable, by written decision. The hearing officer will have the power to waive any portion of the fine in a manner consistent with the decision. The decision of the hearing officer is final and effective on the date of service of the written decision, is not subject to further administrative review, and constitutes the final administrative decision.

1.1.090 Severabilty.

If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be invalid by a decision of any court of competent jurisdiction, that decision will not affect the validity of the remaining portions of the ordinance. The City Council hereby declares that it would have passed this ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of this ordinance would be subsequently declared invalid.

1.1.10 No conflict with federal or state law.

Nothing in this ordinance is intended to create any requirement, power or duty that is in conflict with any federal or state law.

Adapted from the County of Los Angeles Plastic Bag Ban Ordinance.[92]

[92] For more information refer to their website at http://www.bragaboutyourbag.com

Attachment R - Guide to Incorporating Extended Producer Responsibility (EPR) Principles into Purchasing and Procurement Documents

updated Oct. 14, 2011

FLUORESCENT LAMPS / MERCURY CONTAINING LIGHTING

Overview

Why are Fluorescent Lamps a Disposal Issue?

California government, environmental advocates and utilities have been promoting the purchase, and sometimes even subsidizing the purchase, of fluorescent lamps because they conserve energy by using a fraction of energy to produce light compared to incandescent lamps. However, fluorescent lamps contain a small amount of mercury which is a neurotoxin that can cause impaired neurological development. California banned residentially generated fluorescent lamps from landfill disposal in February 2006. While fluorescent lamps save energy up front, the back-end costs to manage are $7,200 per ton as estimated by the City of Los Angeles in their EPR resolution adopted December 17, 2008 as compared to $35 per ton for trash. Proper disposal is not only the law, but ensuring a cost-effective management system is in place at the point of purchase could save your jurisdiction a lot of money.

All fluorescent lamps and tubes are considered hazardous waste in California when they are discarded because they contain mercury. (Title 22, division 4.5, chapter 11, section 66261.50)

This includes:

Fluorescent lamps and tubes:

- Fluorescent tubes, including low mercury tubes
- Compact fluorescents, including low mercury lamps

High Intensity Discharge (HID) Lamps:

- Metal halide lamps, such as floodlights for large indoor and outdoor areas and gymnasiums.
- Sodium lamps, such as those sometimes used as security lighting and outdoor floodlights.
- Mercury vapor lamps, such as those sometimes used for street lighting1 .

1 http://www.calrecycle.ca.gov/ReduceWaste/FluoresLamps/default.htm#AllLampsHaz

In addition, certain policies such as the Energy Policy Act of 1992 and the National Energy Independence and Security Act of 2007 established energy efficiency standards for "general service" fluorescents and the unlawful manufacturing and selling of T12 ballasts in fluorescents all go into effect in 2012. California Product Stewardship Council Page 2 Funded by a grant from the Department of Resources Recycling and Recovery (CalRecycle). © Copyright 2011 by the California Department of Resources Recycling and Recovery (CalRecycle). All rights reserved. This publication, or parts thereof, may not be reproduced without permission from CalRecycle.

How do I Control Fluorescent Lamp Waste?

Reduce your costs and liability through smart procurement. Establish Environmentally Preferable Procurement policies that include Extended Producer Responsibility (EPR), or "take back" language for fluorescent lamps and other types of universal waste.

How do I Create Smart Procurement Policies?

• Review procurement specifications to remove any provisions that may exclude the procurement of products from vendors who support fluorescent lamp Extended Producer Responsibility.
• Amend your specifications by adding Extended Producer Responsibility language into your procurement policies requiring take-back and management services for fluorescent lamps. This will reduce jurisdiction disposal costs and ensure proper disposal.

Sample Policy Language
Producers must propose a program in which they agree to provide take-back and management services for end-of-life fluorescent lamps to (INSERT JURISDICTION), and therefore providing full-cost accounting from purchase to end-of-life cost for the consumer. This can be accomplished through a variety of contractual provisions whereby the Producer agrees to be responsible for taking back the fluorescent lamps and providing for appropriate reuse or recycling when Procurement no longer needs the fluorescent lamps. Such take-back methods and parameters may include, but are not limited to:
• One-for-one exchange of end-of-life products offered by, or previously purchased from the Producer, upon purchase of new products from said Producer.
• Collection of any end-of-life products by Vendor (or subcontractor) for reuse or recycling, preferably to also include provisions that ensure Vendor will continue the program should a subcontractor no longer be able to perform such activities.
• Requirement that vendor must manage all end-of-life collection of their products at a collection facility provided or funded by Vendor.
• Coupon system for pre-paid take-back at permanent regional collection centers
• Requirement that vendor must provide information to the agency on available take-back and end-of-life product management options.
• Requirement that product packaging and containers must clearly display information that the lamps contain mercury and on the Vendor's environmentally preferable end-of-life recycling and disposal options for the product and its packaging, as applicable.
• Requirement that vendor must post the aforementioned consumer information on at least one clearly visible sign at the point-of-purchase for the end user of the product.
California Product Stewardship Council Page 3 Funded by a grant from the Department of Resources Recycling and Recovery (CalRecycle). © Copyright 2011 by the California Department of Resources Recycling and Recovery (CalRecycle). All rights reserved. This publication, or parts thereof, may not be reproduced without permission from CalRecycle.
Sample Proposal Language
End of Life Management 1 [Mandatory]: Vendors must propose a program in which they agree to provide take-back and management services for end-of-life Fluorescent Lamps at reduced cost to the Jurisdiction. This can be accomplished through a contractual provision whereby the seller agrees to be responsible for taking back the products and providing for appropriate re-use or recycling when the buyer no longer needs the products.
Take-back methods may include but are not limited to:
1. One-for-one exchange of equipment offered by, or previously purchased from the vendor, upon purchase of new equipment from said vendor.
2. Collection of any used mercury containing lamps by Vendor or sub-contractor for reuse or recycling, preferably including provisions to continue recycling operations should a sub-contractor no longer be able to perform such activities.

Any proposed programs must comply with the following:
• All fluorescent lamps and tubes must be recycled, or taken to a household hazardous waste disposal facility, a universal waste handler (e.g., storage facility or broker), or an authorized recycling facility (Title 22, division 4.5, chapter 23, section 66273.8. This is the law requiring

that fluorescent lamps be recycled or taken to a household hazardous waste disposal facility, a universal waste handler, or an authorized recycling facility that has been in effect since February 9, 2006).

• If take-back provisions are proposed, agencies must follow applicable laws, procedures and guidelines relating to disposing of equipment prior to invoking disposal procedures. The proposed programs shall continue for the life of the product; e.g., beyond the product contract period.

• Meet the requirements of the RoHS Directive as amended for mercury content limits

• Be ENERGY STAR-rated where applicable:
http://www.energystar.gov/ia/partners/product_specs/program_reqs/Solid-State_Lighting_Program_Requirements.pdf.

• Follow the DOE's 2012 standards for general-service fluorescents lamps

Vendor should also highlight if they are willing to take-back products other than their own.

Targets and Goals:

• Specify lamps with 5 mg of mercury or less and favor ones with less than 3 mg.

Key recommendations of this Zero Waste Plan

- **Reduce First** - This Plan focuses on reducing first and designing wastes out of the system. Critical elements include development of product stewardship and Extended Producer Responsibility (EPR) policies and incentives. The City should also implement an environmentally preferable purchasing policy within the organization.
- **Food Donations** - Once all source reduction methods are utilized, edible food should be donated to food banks and shelters.
- **Plastic and Polystyrene** - The City should adopt an Extended Producer Responsibility (EPR) resolution to guide its product stewardship and EPR policies and programs. Then the City should adopt an ordinance to reduce the use of single-use shopping bags. The use of expanded polystyrene food takeout containers should also be phased out.
- **Reusable Products** - The City should help form a reuse collaborative with reuse businesses and nonprofits throughout the region to expand marketing, and to foster better distribution systems. The City and WM should work with this collaborative to explore the possibility of developing a Reuse Warehouse.
- **Recycling** – Successfully implement new single-stream recycling program so that all residents and businesses can see the benefits of the new system. Update the City's recycling ordinance and provide technical assistance to businesses to comply with the AB 341 State Mandatory Commercial Recycling Program, effective July 1, 2012. Expand public recycling opportunities throughout City.
- **Composting** – Support and expand school composting, commercial on-site composting and home composting programs.
- **Expanded Outreach** – Enhance outreach, education, and training and enforcement/reinforcement programs to incentivize and expand waste reduction, reuse, and recycling participation.
- **Partnerships** – The City should continue to develop and expand it's partnerships with local businesses, community groups, and schools to form better recycling and waste reduction opportunities.. Within the first year of implementation the City should work with Waste Management to develop the City's first Green Business Certification Program.