

County of Santa Cruz CURBSIDER

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The Santa Cruz Fryer to Fuel Program



Imagine collecting the cooking oil that has made our French fries, our donuts, our chips, and our local fried fish and using it to fuel our local fleets of trucks. That is exactly what the Fryer to Fuel program does! The Fryer to Fuel program is a collaborative effort to collect used cooking oil from restaurants and turn it into biodiesel to fuel local Santa Cruz vehicle fleets. The program uses a local waste as a local fuel, and serves as a model of community-based sustainable solutions.

Partnering with local restaurants, Salinas Tallow, EAS Inc., Coast Oil, and local Public Works Departments, the Fryer to Fuel program collected 9,947 gallons of high-quality waste cooking oil over an eight-week period last spring. This oil was then turned into biodiesel and blended with regular Diesel #2 fuel to make 32,000 gallons of B20 (20% biodiesel blend) fuel and sold to local fleets. Continuing at this rate over the next year will result in creating enough fuel to operate City of Santa Cruz's entire biodiesel fleet for two years. This fleet includes vehicles from departments such as City Schools, Emergency Services, Library, Parks and Recreation, Refuse and

Recycling, and many others. It is expected that more restaurants will participate as the program expands, resulting in higher quantities of biodiesel made from a local waste feedstock.

Much of the success of this program is due to the diligence and innovative thinking present at each of our partnering agencies and funding from the US EPA.

Restaurants that participated in the pilot Fryer to Fuel program:

From throughout Santa Cruz County:

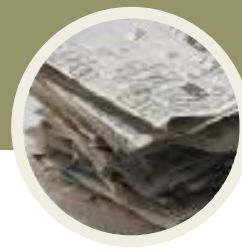
Carl's Junior	Taqueria los Gallos
Chili's	Bruno's BBQ
99 Bottles	Taco Bell
Pearl Ally Bistro	Taqueria Sofia's
Falafel House	Aptos Burger Company
Bad Ass Coffee	El Palomar
Miramar	Hank's at the Hook
Gilda's	Pink Godzilla
Dolphin Restaurant	Scotts Valley Falafel
Carniglia's	Maya's Restaurant
Gilbert's	Auntie Mame's Cafe
Riva Fish House	



From UCSC Food Services:

Stevenson/Cowell Dining Hall
Crown/Merrill Dining Hall
College 9 & 10 Dining Hall
College 8 Dining Hall
Kresge/Porter Dining Hall
Moreno's at Merrill
Terra Fresca

The Seven Cycles of Recycled Paper



Paper, it is said, can be recycled up to seven times. Taken with the fact that recycled paper is also cheaper and easier to convert to pulp than wood, it makes an ideal candidate for collection and reuse. But what exactly are these seven cycles, and what happens to paper after this point? In order to answer these questions, we need to examine the paper-making process more closely.

Definitions

First, it's important to know that "recycled" can mean many different things. For example, paper companies used to consider mill scraps from paper-making as recycled content. The key phrase to identify is *post-consumer*, which refers to content that comes from products that have been used for their ultimate purpose, such as yesterday's newspaper.

Grades

Second, you should know that when it comes to paper, grades count. There are five main grades of paper according to the EPA, but you're most likely to find these four in your home or workplace.

- Newsprint: Newspapers
- Office paper: High-grade printing and writing paper, including copier paper, envelopes and letterhead.
- Corrugated containers: Boxes of all kinds made from thick cardboard with a wavy inner layer.
- Mixed paper: This category is a catch-all for the other types of paper, such as phone books, magazines, junk mail or colored paper.

While lower grade paper, such as a cereal box, can be turned in another cereal box, it cannot be recycled into a bright piece of office paper. Some offices keep high-grade paper separate so it can be turned back into office paper. Sorted paper gives paper mills more versatility in what they can produce.

Paper of all grades is broken down in the same way regardless of type. Batches are agitated in a water and chemical bath in order to break them down into "pulp," the small fibers that make paper. Next, the pulp undergoes several stages of cleaning and screening to remove contaminants like glue, plastic, staples, and finally, ink. After the pulp is re-bleached, if necessary, it is ready to be mixed with virgin fibers and made into paper once more. At this final stage, recycled pulp is no different from virgin pulp.

Why only seven cycles?

The answer boils down to size. It's the long, strong cellulose fibers that hold a flexible piece of paper together. Each time wood fibers are reprocessed (agitated, heated, pressed) they break down a bit. After about five to seven cycles, the pulp bits are so small that they simply slip through the filtering screens to be dealt with by the mill's wastewater treatment facility. In this manner, the quality of recycled paper is not affected by pulp that is no longer useful. Most products today, especially corrugated containers, contain recycled post-consumer content, but consumer demand (more than federal or industry standards) is what drives paper companies to increase recycled percentages. For paper of all kinds, purchasing or requesting recycled goods maintains a steady demand for these products.



Why bring your own bag?

Some paper & plastic statistics:

- Each year, United States consumers use 30 billion plastic and 10 billion paper grocery bags, requiring 14 million trees¹ and 12 million barrels of oil.²
- The pulp and paper industry is the 2nd largest industrial user of energy in the U.S.³
- More than 46,000 pieces of plastic contaminate each square mile of our oceans.⁴
- Over 100,000 marine animals die every year from plastic entanglement.⁵
- Only 1% of plastic bags are recycled annually.⁶

Bringing your own bag is an easy way to reduce and reuse.

1. "Paper or Plastic?", Delicious Living Magazine, March 2002.
2. Reusable Bags Tackle Plastic Bag Mess, Organic Trade Association.
3. "Paper Cuts: Recovering the Paper Landscape", Abromovitz & Mattoon, Worldwatch Institute, Washington DC, 1999.

4. Keep the Sea Plastic Free, Bin It, Australian Government, Department of the Environment and Heritage
5. Turtles Don't Shop, Earth Resource Foundation.
6. Plastic Bags: A Necessary Eyesore?, Worldwatch Institute.

Common Paper Contaminants

Contamination is everywhere when it comes to recycling. It most likely occurs because people want to recycle as much as possible, and figure that anything tossed in a recycling bin will be recycled in some way.

Actually, the opposite is true, as contamination is the quickest way that an entire batch of recyclables will end up in a landfill because of a few outsiders. This is especially true when it comes to paper, since you rarely find a paper product that is entirely made of paper. The best way to ensure that your paper is safe to recycle is by knowing what is accepted. Here are some materials that will likely interfere with recycling once it reaches a paper mill:

1. Food Waste: Paper is recycled by mixing fiber with water to make new pulp. Well, you may have learned in chemistry class that oil and water don't mix well, so oil stains simply won't dissolve in the water. Instead, you'll get new paper that still has oil stains. Oil is a pretty common cooking ingredient, meaning that it's a likely remnant for lots of different foods. You'll be able to tell the difference between a water stain and an oil stain because oil won't evaporate over time.

Common Example: Oily or greasy pizza boxes.

2. Paint Products: Anything that comes into contact with paint.

Common Example: Paint-stained newspaper.

3. Wet Paper: You may be wondering why wet paper is a contaminant if the paper will be drenched with water prior to recycling anyway. The answer is that exposure to water shortens paper fibers, making it less valuable. This is yet another reason to not try to recycle napkins or paper towels. Make sure your paper recyclables are covered if it's raining.

Common Example: Wet newspaper. You may use it to stop roof leaks from ruining your wood floor or to line your pet hamster's cage. Regardless, wet newspaper has little value to recyclers. Considering most newspapers are made from recycled newsprint, it's important that what we recycle is in good shape.

Non-Contaminants: Now that you know what shouldn't go in the recycling bin, here are a few items that are typically safe to include with your paper recycling: Envelopes with adhesive, metal latches or plastic, windows, paper clips, staples.



Santa Cruz County Recycles

While the population of Santa Cruz County has increased only 1% since 2003, the amount of garbage we generate has increased 15% in the same time period. We each generate about 13 pounds per person per day. Though we continue to increase our diversion efforts—we recycled over 64% of the waste generated last year – we need to continue to conserve our limited community landfill space. Remember to first reduce by purchasing less or buying items with reduced packaging or packaging with post-consumer recycled content. Then reuse. And finally, continue to recycle as much as possible.

SAVE THE DATE!

**Yard and Wood Waste Fire Prevention Week
April 18th–26th.**



Recycle your fluorescent light bulbs

Fluorescent light bulbs contain mercury, a dangerous pollutant. NEVER throw your used bulbs in the trash! Now you can take used fluorescent tubes and compact fluorescent bulbs back to the store! Below are some of the locations now accepting used bulbs:

ACE Hardware

- 855 Almar Ave.
Santa Cruz
(831) 818-0456
- 1984 Freedom Blvd.
Freedom
(831) 724-4740
- 451 Main St.
Watsonville
(831) 724-4740
- 72 Rancho del Mar
Aptos
(831) 818-0456

GreenSpace

- 1122 Soquel Ave.
Santa Cruz
(831) 423-7200

Orchard Supply Hardware

- 1601 41st Ave.
Capitola
(831) 475-7701
- 1060 S Green Valley Rd.
Watsonville
(831) 728-7701

Scarborough Lumber

- 20 El Pueblo Rd.
Scotts Valley
(831) 438-0331
- 218 Mt Hermon Rd.
Scotts Valley
(831) 438-0581
- 9470 Highway 9
Ben Lomond
(831) 336-5142
- 12990 Highway 9
Boulder Creek
(831) 338-6467

ProBuild

- 2435 41st Ave.
Soquel
(831) 475-6100
- 235 River St.
Santa Cruz
(831) 426-1020

Mandatory Recycling Surcharge Fee

Do your drop box loads contain metal, appliances, cardboard, wood waste, concrete, asphalt, brick, porcelain products, mattresses, sheetrock, TVs, tires, carpet, foam padding and other recyclable items mixed with garbage?

If they do, your load will be charged a 50% mandatory recycling surcharge fee in addition to garbage rates of \$66.00 a ton.

- Loads with source separated recycling will receive the lowest rate, such as yard waste at \$33.00 a ton or concrete at \$6.00 a ton.
- Loads that contain garbage with less than 5% recyclables will be charged \$66.00 a ton.
- Loads with mixed recyclables and minimum garbage that meet Construction and Demolition (C&D) acceptance criteria will be charged \$44.00 a ton.
- Loads that contain garbage with more than 5% recyclable items will be charged \$66.00 a ton plus a 50% additional surcharge.



Household or commercial hazardous waste is not permitted in drop boxes and will result in rejection of the entire load at the disposal site. The box will be returned to the customer at their expense for removal of the banned items, which include paints, stains, pool chemicals, cleaners, solvents, fluorescent lights, TVs and monitors.

In addition, if you have curbside recycling and fail to comply, you will be warned twice with a yellow tag. Then, if you do not comply, you will be red-tagged and your trash will not be picked up until you sort it out. For more information on this mandatory recycling ordinance you can call 454-5154.

County of Santa Cruz Public Works

701 Ocean Street, Room 410
Santa Cruz, CA 95060
(831) 454-2160

Presort Standard
U.S. Postage
PAID
Complete Mailing
Service, Inc.



Printed on 50% recycled 30% post-consumer waste paper processed chlorine-free, using soy-based inks.

Recycling Resources

Recycle Information Line 831-454-2333

- What and where to recycle (recorded message)

Curbside Refuse, Recycling and Yard Waste Collection 800-665-2209

- Begin new service
- Report missed recycling or trash service
- Request delivery or removal of carts
- Obtain oil recycling jugs

County Public Works Dept. 831-454-2160
www.santacruzcountyrecycles.org

- Apartments and business recycling inquiries
- Complaints, compliments or suggestions

Household Hazardous Waste 831-454-2606 (recorded message)

- Schedule for free disposal
- Non-hazardous alternatives
- Free surplus paint

Ecology Action 831-426-5925

- www.ecoact.org • www.ecocruz.org
- General recycling information

Rotline 831-423-HEAP (423-4327)
Composting Resources

- Worm Doctor 831-427-3452
www.compostsantacruzcounty.org

Buena Vista Landfill 831-454-2430
(recorded message)

- Recycling Center: 479-1055
(Operated by the California Grey Bears)

Ben Lomond Transfer Station 831-454-2430
(recorded message)

- Recycling Center: 338-1728
(Operated by the Valley Women's Club)

City of Santa Cruz Resource Recovery Facility 831-420-6270 (landfill)

- Open to Unincorporated County residents in Davenport and Bonny Doon only



Para información en español sobre el reciclaje en las áreas no incorporadas del condado de Santa Cruz, favor de llamar al (800) 665-2209.