RECYCLE RIGHT

GOOD INTENTIONS ARE WASTED WHEN THE WRONG MATERIALS ARE PUT IN YOUR RECYCLING AND COMPOST CARTS.

SIMPLE STEPS TAKEN TO RECYCLE CORRECTLY AT HOME AND WORK NOT ONLY SAVE NATURAL RESOURCES, THEY SAVE MONEY.

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The Price Tag of Recycling Wrong

THE HIGH COST OF CONTAMINATION

Recyclables are baled together for sale after being processed, but contamination will send entire bales to the landfill.

The U.S. generates a lot of recycling – tens of millions of tons a year, in fact. China, the largest importer, has eagerly purchased our country's recyclables for more than 20 years to fuel its manufacturing growth. However, in January 2018, that all changed. China closed its doors to our recyclables, along with others from around the world. Why? Contamination.

Contamination occurs when garbage, food waste or the wrong recyclable items are put into the recycling cart. When this happens, items that were considered "diverted" from landfills end up there anyway — incurring huge costs, damages and lost revenue along the way.

China's "National Sword" policy bans mixed grade materials like paper and plastics along with all foreign commodities that do not meet its stringent 0.50 percent contamination threshold. In a single decisive action, China has made recycling contamination an international crisis. If contamination isn't caught when it's processed on the line, recyclables are turned away by international buyers — leaving the U.S. with the burden of these unsold items.

"Once the material gets to their port and gets inspected, if there is contamination, you're going to have to turn that boat around and come back. And your costs have just exploded," said Fred Stemmler, general manager of Recology Sonoma Marin. "Then you have to decide whether or not it's worth it to reprocess and send it back."

Contamination also racks up extra costs at local processing facilities, putting pressure on the municipalities that protect the environment and communities from waste.

"The costs are going up and the revenues are going down," said Roger Williams, chief financial officer for Marin Sanitary Service (MSS). "That puts the local hauler in a very challenging position. And with the state mandating levels of recycling, if you don't hit certain thresholds, they will fine the local jurisdictions."

DON'T BE A "WISHFUL RECYCLER"

Throwing an item you "hope" is recyclable into the recycling cart doesn't mean it will get recycled!

Look for the recycle symbol throughout this publication for easy tips on stopping these items from becoming expensive contaminants.

Increased processing costs and fines to local jurisdictions could ultimately be borne by the ratepayer. Recycling right not only saves the environment, it saves money.

Items you put into your recycling cart are processed at facilities specially designed to separate and bale materials that are like one another. When contaminants are present, sanitation workers have to remove these nonrecyclable items from the stream by hand. The more contaminated material in a load, the slower the process. Major contamination can also cause damage to equipment, or shut down the process altogether.

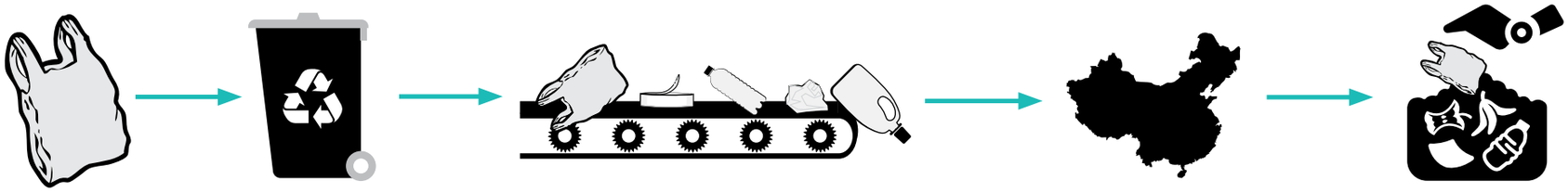
"Every time you have a shutdown, items are no longer moving on the line," said Stemmler. "You have 40 people standing around and nothing to sort."

MSS, one of Marin County's five haulers, decided early on to implement a dual stream recycling program to reduce these cost risks. Unlike a single stream, a dual stream program keeps paper items separate from bottles and cans. This keeps common contaminants like glass and food out of the paper recyclables. For years, the contamination rates at the Marin Recycling Center, MSS's processing facility, were less than 1 percent. However, for the past couple of years, the contamination rates have approached 10 percent.

"Ten percent contamination is the limit for certified recycling centers in California," said Kimberly Scheibly, director of compliance and customer relations at MSS. "Now the stakes are even higher with China's restrictions. That is why it is so important to recycle right the first time."

Some haulers are able to charge for contamination in recycling carts, to cover sorting items and cleaning recyclables, but others cannot. All haulers, however, are contractually obligated to collect recycling no matter how contaminated it may be.

"Even if we can charge for contamination, it doesn't solve the problem," Williams said. "We really do depend on customers to recycle right."



UNRECYCLABLE ITEM GOES INTO RECYCLE CART

SORTING PROCESS
- Contaminates other recyclables
- Damages machinery
- Reduces productivity
- Adds labor time and costs

AT MARKET
- Rejection of contaminated bales overseas
- Entire load shipped back for disposal
- Transportation costs doubled

DISPOSAL
- Revenue lost on rejected bales
- Transportation and landfill disposal costs incurred

How to Recycle Right!

EVERYONE HAS A PART IN KEEPING GARBAGE OUT OF RECYCLING AND COMPOST CARTS

Joe Garbarino has spent over 40 years in the recycling industry. He helped develop one of the first curbside recycling programs, but sees every day how contamination can render recycling efforts useless. **PHOTO BY OWEN KAHN**

BY ANNE STOKES

Joe Garbarino was 16 in 1948, the year he earned his first paycheck from a San Francisco scavenger company that would later become Recology. Today, at the age of 85, he still comes into work every day with the same focus he had back then, although now he is chairman and co-owner of Marin Sanitary Service.

"I'm still a scavenger. I hate burying anything that can be resold," he said. "The scavenger business is very much like the recycling business, we're just asking the people to cooperate."

By cooperate, Garbarino is talking about solving a serious recycling problem: contamination.

Think of recycling like making an omelet: While it takes effort to carefully crack an egg and empty its shell, it's much more trouble to pick small pieces of shell out of your breakfast after smashing the whole egg into the pan.

In order to successfully recycle items, different types of materials must be processed separately. Contamination occurs when materials get mixed together: plastic with food residue, paper with glass, cardboard with film wrap. Not only are contaminated materials more expensive to process, but loads of otherwise perfectly recyclable materials can end up in landfills because of contamination.

"People need to better understand what the rules and regulations are," Garbarino said. "We may have to dump all our recyclables if we don't clean up our act. Why bury these commodities when we can do something in a reasonable way?"

Today, the percentage of materials diverted away from local Bay Area landfills is around 75 percent. While California has long been a leader in the recycling movement, there are still improvements to be made. The first step is reducing the amount of materials we use and waste we generate. The next is lowering contamination rates in recyclables.

Sometimes good intentions, such as "wishful recycling" — when people put non-recyclable items into the recycle cart with the *hope* they can or will be recycled — can doom whole loads of materials to landfills, incur hefty costs and damage expensive machinery.

"It's always our goal to reach higher diversion rates. It benefits the rate payer," he said. "The more trash you make, the higher your rate goes. The problem is the contamination."

Garbarino said that we all have to do our part to clean up the world, but the best place to start is locally.

"We need to re-educate the people and make this one of the cleanest counties in the United States in regards to the recycling program," he said. "Do the right thing and be proud of it."

Have an item you're not sure can be recycled? Don't be a wishful recycler — when in doubt, check it out with your local hauler! Find their guidelines at Zerowastemarin.org/residents/who-is-my-hauler/ or Recyclenow.org/disposal/garbage.asp.

RECYCLING FACT 1:

Plastic bags and film wrap should go in the garbage cart!

Some supermarkets accept clean plastic bags for recycling, but they need to stay out of your recycling cart.

Why you should recycle correctly

While it may seem like an inconvenience to clean out food containers or separate film wrap and polystyrene foam from cardboard packaging, it is impossible at the processing facility. That's why everyone needs to do their part to ensure local recycling efforts are successful.

Recycling the right way can:

1. **KEEP WORKERS SAFE**
   Hazardous materials such as batteries and single-use propane tanks can cause explosions, risking the lives of employees on the sorting line.
2. **CREATE SELLABLE MATERIALS**
   Materials like paper and plastic are often sold to oversea manufacturers, but only if the recycling loads are high-quality. Contamination can render loads unsellable.
3. **DECREASE COSTS**
   Picking out contamination at the facility is labor-intensive and requires expensive equipment. Non-recyclable items can also jam machinery and force facilities to temporarily shut down, decreasing productivity and increasing costs.
4. **SAVE RESOURCES**
   Successful recycling reduces the amount of natural resources and energy needed to create new goods.
5. **KEEP RESOURCES FROM BEING LANDFILLED**
   Contamination can send otherwise recyclable materials to landfills.

ALWAYS RECYCLE THESE AND MAKE SURE THEY ARE EMPTY:

Plastics — Back to the Basics

RECYCLING CORRECTLY IS IMPORTANT, BUT IT DOESN'T HAVE TO BE HARD!

BY MATT JOCKS

Dos and Don'ts of plastics

Remembering which plastics are recyclable can be easy!

"A general rule we have is that if it's a bottle, tub or jug, it's probably OK to recycle," said Celia Furber, waste zero manager at Recology Sonoma Marin.

ALWAYS

- ✔ **Recycle containers:** Such as bottles, tubs, jugs and jars.
- ✔ **Make sure items are clean and dry:** Clean plastics with a quick swish of water or wipe with a napkin to remove food residue.
- ✔ **Leave plastic caps on bottles:** Loose caps end up in the environment or landfill.
- ✔ **Educate neighbors, employees or coworkers:** So everyone knows how to recycle plastics correctly!

NEVER

- ✘ **Don't bag recyclables:** Putting recyclables in plastic bags can damage equipment and make their contents hard to sort.
- ✘ **Don't recycle film plastics:** Flimsy plastics like sandwich bags or other plastic bags should be thrown in your garbage cart or taken to grocery stores for recycling.
- ✘ **Don't recycle small plastics:** Anything smaller than 4 inches, like utensils or straws, is too small to process.

Cea Higgins has spent many hours on the coastline, cleaning up plastics and other garbage to keep wildlife from ingesting or becoming entangled in waste products.

It's hard work.

What isn't so hard are the steps she takes at home to reduce the amount of plastic waste that makes its way to landfills, or worse, to the beautiful shores of Marin and Sonoma counties.

The steps are simple: choose products that are fully recyclable or have fewer non-recyclable parts, give a quick rinse to plastics with food bits on them, keep plastic bags out of the recycling cart and caps on plastic bottles that go into the cart.

"It's not that much more work," Higgins said. "It's just a matter of getting your family into the habit of doing it correctly."

Higgins, a Bodega Bay resident, has been on the front line of both cleanup and education. She is executive director of the non-profit Coastwalk and volunteer and policy coordinator for Sonoma Coast Surfrider.

Recently, Higgins has seen a major reduction in the plastic waste she's seen on her cleanup missions. She largely credits this to the recent ban on single-use plastic bags, but knows residents can expand that impact by being mindful about plastic recycling at home.

"It's equally important to have people being part of the solution," she said.

Jim Iavarone, co-owner of the Mill Valley Refuse Service, said the actions residents can take at home are simple.

For instance, it is vitally important to keep food out of the recycling stream, where it can contaminate not just the individual item but an entire bale of recyclables — making them unsuitable for anything other than the landfill.

"A rule of thumb is just to give containers, contaminated plastic, a quick rinse — like you would rinse before putting a regular plate in a dishwasher. Or wipe them out with a paper towel, which can be composted," Iavarone said, adding that liquid containers can simply be emptied.

Understanding what *can't* be included in recycling is also critical: Plastic bags can become entangled in machinery and bring processing to a halt, polystyrene packaging and peanuts break into small bits that damages machinery, loose bottle caps usually wind up in the landfill and take up space.

The goal is to maximize recycling and minimize what gets put in the ground or winds up where it shouldn't be.

"If we're putting things in recycling carts that are half-full of food or aren't recyclable and believing that we are recycling, we're all fooling ourselves," Iavarone said. "That's not getting recycled. And a container that could have been recycled is winding up in a landfill."

RECYCLING FACT 2:

Not all plastics are recyclable.

Items like plastic toys, plates, utensils and straws all go in the garbage cart.

Make sure to keep any plastic bags used to collect recyclables out of the recycling cart! Throw plastic bags used as liners into the garbage cart after you've emptied their recyclable contents into the recycling cart.
PHOTO BY OWEN KAHN

RECYCLING FACT 3:

Polystyrene foam packaging and peanuts need to stay out of the recycling cart.

Put these items into your garbage cart, reuse them or see if there's a nearby facility that will recycle them.

Make it a Habit

STUDENTS LEARN HOW SMALL AND SIMPLE ACTIONS CAN SAVE THE EARTH

BY ANNE STOKES

At Oak Grove Elementary School in Sebastopol, recycling is par for the course — students know it's something that's expected of them, just like raising their hand to talk in class.

"We call it the 'Oak Grove Way,'" said Principal Paige Gardner. "We recycle, we compost, we have as little trash as possible. Students take responsibility — they ask if they don't know where something goes when they're throwing something away — and they learn the proper way to recycle and reduce."

The "Oak Grove Way" started more than 20 years ago when then-custodian Fred Hall took on the task of teaching students and staff how to reduce, reuse and recycle. Today, the programs he implemented are still teaching students the importance of being ecologically responsible. Every classroom has a separate bin for certain items, including mixed recycling, compost, trash and snack bags (like chips and granola bar wrappers), which are recycled through a company called TerraCycle.

"Students know the trays that they eat off of are compostable, they know that most of their food is compostable, they know that the napkins that they use are compostable and they know that any clean plastics — like their yogurt cups if they clean them out — are recyclable," Gardner said.

Oak Grove also boasts composting and garden programs, where students can literally taste the fruits (and vegetables) of their labors. At lunchtime, all 435 students separate leftover waste from their meals, including food scraps and paper napkins for the campus's composting program. Students are also taught how their food scraps are composted and used to grow food, which they get to eat for lunch one day a week. The scraps from this lunch then become compost again.

According to Joseph Essig, operations manager for Recology Sonoma Marin, programs like Oak Grove's are important to help kids develop good recycling habits early on.

"The cleaner and more segregated the materials are that arrive to our facilities, the better we are able to recover and recycle them," Essig said. "Building these habits and knowledge base will help us as an industry, as a county and as a planet, to divert from our landfills and be able to reuse more of the products we have."

For Gardner, the end goal is to give students the tools they need to be good environmental stewards.

"I hope it instills in them a respect for the earth and that they continue to do this at home and in their lives and that they understand how important it is," she said.

For tips and guidelines on recycling responsibly at schools, like keeping plastic bag liners out of the recycling cart, visit Zerowastemarin.org or Recyclenow.org.

Keep different materials separate!

Residents and businesses may not be able to avoid packaged products altogether, but separating packaging materials can save trouble later in the recycling process.

"Not recycling properly can cross contaminate good items," says Jim Iavarone, co-owner of Mill Valley Refuse Service. "It turns recyclable materials into garbage and increases the expense of recycling."

RESIDENTIAL RECYCLERS

- Do not place film plastics — like plastic bags or bubble wrap — in recycling bins. Return them to stores for recycling or throw them in the trash.
- Polystyrene foam and peanuts cannot be recycled. Throw them in the trash, don't leave them in cardboard boxes.
- All materials must be free of liquid or solid food residue.

COMMERCIAL RECYCLERS

- Train employees to properly sort and dispose of materials.
- Provide separate bins so materials can be easily and correctly sorted.
- Pay attention to the types of materials your company generates the most and ensure those materials are recycled properly.

Out of the Landfill and Onto the Land

COMPOSTING FOOD SCRAPS IS GOOD FOR THE EARTH IN MORE WAYS THAN ONE

BY ANNE STOKES

Teacher Sunny Galbraith shows the next generation of environmental stewards how to live more sustainably through science. She's found the best way to teach her fifth grade and high school students is to practice what she preaches.

"I teach about global warming and environmental issues so I feel that it's important to practice it in my personal life," she said.

Galbraith and her family participate in her county's composting program, which allows her to dispose of all food scraps such as fruits, vegetables, grains, meat, bones and dairy products. She's also able to include her food-soiled paper, like paper towels and napkins.

"It's so easy, it's wonderful. I really appreciate that we have the curbside pickup," she said. "It feels good to keep materials out of the landfill and you're recycling all those nutrients into good soil again."

Composting is an ecologically friendly way to dispose of organic waste in more ways than one. The decomposition process produces mainly carbon dioxide, whereas organic material buried in a landfill creates methane, a greenhouse gas 25 times more potent than CO2. In California, food is the second largest source of waste, and Marin Sanitary Service found that it comprises up to 29 percent of residential and 39 percent of commercial waste. Composting is a good way to save ever-dwindling landfill space.

"Everything you put into your green cart, goes into compost and goes back into the environment," said Alisha McCutcheon, composting manager at Redwood Landfill. "So if you don't want your tomato plants growing in what you're sticking into your green cart, don't put it in there — just stick it in your trash bin."

Keeping food scraps separate from other recyclable materials is also important. Just as food residue can contaminate loads of otherwise recyclable materials, recyclables such as plastic, metal and other materials can contaminate organic waste — putting otherwise compostable materials in a landfill after a lengthy, labor-intensive and costly process to try and remove these items in the processing facility.

Galbraith said that incorporating composting into your everyday routine is a small change that anyone can make. It's so easy, it's something she encourages her students to do.

"I like to tell them, 'You can do this at home and you can start tonight! Just put a bowl with a lid on the counter and that can be your chore,'" she said.

While an easy habit to maintain, successful composting and recycling in Marin and Sonoma counties relies on everyone — residents and businesses — doing their part to keep contaminants out of recycling streams.

"There's not enough person-power at the compost facilities to separate contaminants out," Galbraith said. "We really are counting on people to do that in their individual homes and businesses and schools. That's where we have the person power to do it."

Contact your local waste hauler for more information on what composting programs are available for your home or business.

Separating food scraps for composting is easy! Sunny Galbraith collects food scraps while she cooks and keeps her food waste out of the trash and away from recyclables.
PHOTO BY OWEN KAHN

RECYCLING FACT 4:

Biodegradable or "compostable" bags go in the garbage cart!

These bags are not accepted in Marin and Sonoma counties in order to produce compost allowed in organic farming.

Composting: it does a planet good

Composting is not only good for the environment, it's easy! Marin and Sonoma County residents can add food scraps and food-soiled paper to their compost cart.

These materials are used to create a nutrient-rich compost. Some food scraps collected in Central Marin are even used to create renewable energy! Contact your local hauler to find out more.

WHAT TO COMPOST

- ✔ **Food scraps** such as vegetables, fruit, meat and dairy products
- ✔ **Yard waste**, including lawn clippings, leaves and flowers
- ✔ **Food-soiled paper** like napkins, greasy pizza boxes and non-shiny paper plates

WHAT NOT TO COMPOST

- ✘ Glass
- ✘ Metal
- ✘ Human or pet waste
- ✘ Any plastics, *even if they say "biodegradable*" or "compostable*"*

**These materials are not approved for compost used in application for organic farming.*

Top Ways to Recycle Cleanly and Correctly

At Home

✔ BE PROACTIVE:

Consider packaging when you make purchases. Ask yourself what will happen to bags, films or plastic components in objects when you are done with them.

"You should start thinking about this before you actually buy," said Patrick Carter, executive director at Sonoma County Waste Management Agency. "If the price is the same or close, choose the item with less packaging. Recycling is a good thing, but reducing is even better."

✔ KNOW YOUR OPTIONS:

Find out if there are any take back programs in your area for things like plastic bags or polystyrene foam peanuts and blocks — then return them instead of placing them in the garbage.

✔ SWAP THE COFFEE CUP:

Invest in a reusable drink container and remember to use it when you are on the go. Take-out cups are not recyclable.

✔ WATCH FOR HAZARDS:

Find out where to take almost any type of household hazardous waste in Marin and Sonoma counties by visiting Zerowastemarin.org and Recyclenow.org.

As a Business

✔ KEEP IT DRY:

Liquids can spoil entire loads of paper and cardboard. Keep the flip-up lids on your outdoor recycling, compost and garbage containers closed and make sure they are dry before filling.

✔ TAKE ADVANTAGE OF RESOURCES:

Contact your local hauler to obtain training and informational literature and posters. Help your employees learn about proper recycling!

✔ BECOME DISTINGUISHED:

Show the public and your customers that you care by becoming recognized as a Certified Green Business! Register in your county at Greenbusinessca.org and use this distinction in your marketing.

✔ FOLLOW THE LAW:

Businesses that generate 4 cubic yards of solid waste per week must have a recycling program in place, according to state law.

✔ GIVE BACK TO THE COMMUNITY:

Edible food waste can do more than just be composted. Consider donating it to feed people or animals. Options include area churches, food banks, family support centers and Cropmobster.com.

WHAT DO THE NUMBERS IN THE RECYCLING TRIANGLE MEAN?

Everyone knows that a stop sign means "stop." Unfortunately, understanding the recycling symbol is not as easy.

"Product manufacturers have taught the public that when they see this symbol, it means the item can be recycled," said Kimberly Scheibly, director of compliance and customer relations for Marin Sanitary Service. "This is not always the case."

These numbers simply indicate the general type of resin used to make a plastic item — not that an item is always recyclable. There are a lot of plastic items with this symbol that are really just contaminants in the recycling bin. "Items such as polystyrene foam packaging and peanuts, plastic bags and compostable plastic containers all have the recycling symbol and are all major contaminants," Scheibly said.

Contact your local hauler to find out which numbers in the recycling symbol are accepted in your area. You can also learn more about resin codes at https://learn.eartheasy.com/articles/plastics-by-the-numbers/.

RECYCLING FACT 5:

Properly sorting your recyclable materials matters!

Just because an item is put into the recycling cart doesn't mean it will eventually end up in the right place.

5 MAIN OFFENDERS of contamination

Mixed materials

Dirty containers

Flimsy plastics

Take-out cups

Polystyrene materials

RECYCLING RIGHT MATTERS!

Recycling the right way saves time, money and the environment!

Recycling efforts have come a long way from the "throwaway lifestyle" of the 1950s, but there are still improvements to be made!

Recycling the right way keeps the environment cleaner and conserves energy. However, the U.S. is at risk of being stuck with too much trash for its overflowing landfills because our recyclables contain too much contamination to meet international standards.

Just because you put something in a recycling cart doesn't mean it gets recycled. Worse, it can contaminate loads of otherwise recyclable materials. Recycling only saves when it's done right!

- Ensure materials are free of liquid or solid food waste by wiping or lightly rinsing out plastic, glass and aluminum containers
- Separate recyclable from non-recyclable materials (such as cardboard from polystyrene packaging and peanuts)
- Know what materials your hauler and local facilities can process

KEEP MARIN AND SONOMA COUNTIES FREE OF CONTAMINATION

Recycling right can be easy, but make sure you know the correct way to do so as a resident, business or school!
What you can recycle — and how — depends on your local hauler's processing capabilities. Find answers to common questions about your recycling and composting carts, and guidelines for what can and cannot go in them by checking with your hauler!

FIND YOUR HAULER AND MORE RESOURCES AT:

Marin Hazardous and Solid Waste Joint Powers Authority:
Zerowastemarin.org

Sonoma County Waste Management Agency:
Recyclenow.org

WM EarthCare™:
Redwoodlandfill.wm.com

MARIN AND SONOMA COUNTY HAULERS:

Marinsanitaryservice.com

Millvalleyrefuse.com

Recology.com/sonomamarin

Baycitiesrefuse.com

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