

Contamination in Colorado: State, local and industry perspectives



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Contamination in Colorado: From the public sector perspective

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Agenda (CDPHE, City of Fort Collins then Waste Management)

- Project background
- Recycling lists in CO
- Why focus on contamination
- Contamination rates in CO
- Survey results
- Free outreach materials



CDPHE Project Background

Statewide campaign with a common message to improve residential recycling!

- Residential recycling programs are very localized, few aspects apply statewide
- Lots of variation on acceptable materials, labeling, branding, signage
- State has a limited role with haulers and collection of recycling
- Standardized signage or outreach to improve residential recycling statewide?
- Guidance from The Recycling Partnership
- Research contamination (non-recyclable waste) in recycling



Various Municipal Recycling Lists in Colorado



CONTAINERS
We require sorting of all materials into five categories. Four of which need their own separate containers. Corrugated cardboard does not require a container. (2) CKI has green, open, (3) gallon UV resistant recycling bins available for \$12.99 each. Also available are 22-gallon reusable polypropylene bags with handles. Four are supplied to new customers at no cost and replacements are \$8.99 each. However, we do not require that you use our containers. (Plastic bins of all types, laundry baskets, and boxes work well. Please make sure that your containers: 1) are not falling apart; 2) weigh no more than 40 lbs. with recyclables in them; and 3) do not collect cans, boxes, garbage, etc.)

PREPARING RECYCLABLES
Corrugated cardboard should be flattened and weighed down on windy days, but does not need to be made a container. All other materials need to be sorted into different containers and secured against the wind prior to pick up. Heavier materials will not be collected. Materials from different categories should never be mixed together.

THE FIVE CATEGORIES OF MATERIALS:

1. GLASS CONTAINER:
WE TAKE glass jars, bottles, and jars of any color. Please rinse them out and remove all lids. Small jars can be recycled with cans. Discard any others.
WE DO NOT TAKE glass that is not a bottle, jar, or jug. We do not take mirrors, ceramics, drinking glasses, wine, plate glass, light bulbs, auto, hot, tempered glass of any kind (windshields, windows, etc.), glass paper, or boards.

2. PAPER PRODUCTS CONTAINER:
WE TAKE newspapers, magazines, catalogs, junk mail (please open and remove any sticky return address labels or plastics), paperback books, white or pastel office quality paper, and envelopes. Shredded paper is also accepted. Paper egg cartons go in this container.
WE DO NOT TAKE wet paper, plastic newspaper delivery bags, cartons, news magazines, photographs, greeting cards, gift wrap/bags, tissues or paper towels. Brown paper bags go with corrugated cardboard.
Remove and discard plastic sleeves, straps, and bags. Please check with local grocery stores for availability of plastic bag recycling.

3. CHIPBOARD/PAPERBOARD CONTAINER:
WE TAKE single-layer chipboard such as full-sized cereal/cracker boxes, QA/TA/BA or soda containers, and toilet/paper towel tubes, construction paper and poster board. Up to 8 to make sure it is single-layer, not corrugated.
WE DO NOT TAKE wet chipboard, milk/juice cartons, paper plates/ food-waxed paper, laundry/dish detergent boxes or waxy paperboard.

TELEPHONE BOOKS:
WE TAKE all telephone books. Please remove plastic wrap and magnets. Stack separately next to containers. Do not mix them with magazines and catalogs.

4. ALUMINUM, STEEL, AND PLASTIC CONTAINER:
WE TAKE aluminum cans, steel cans, metal jar lids, and solid plastic #1, #2 & #5 containers. Limit size to 7 gal. and under. Please remove and discard all plastic lids. Rinse & drain food containers. Completely drain non-food containers.
WE DO NOT TAKE #3, #4, #6 & #7 plastics; aluminum foil, tin foil, soap aluminum or steel pieces; NO foam of any kind; Styrofoam, insulation foam, packing peanuts; NO plastic bags (check with local grocery stores for plastic bag recycling); NO storage bins, furniture, toys, trash cans, etc.; NO plastics marked "biodegradable" or "compostable"; NO Blubber or clumped packaging regardless of number; commonly used as clear plastic salad, vegetable, and takeout containers.

5. CORRUGATED CARDBOARD AND BROWN PAPER SACKS:
WE TAKE non-glass, uncoated corrugated cardboard. Corrugated cardboard will have two layers of cardboard separated by a millimeter piece of cardboard. Tear it to verify. Please break down, flatten and stack cardboard next to other recyclables. Weigh down on windy days. Hang brown paper sacks with your cardboard and not with the paper. A sack of such works well for larger amounts.
WE DO NOT TAKE wet cardboard, old/painted/painted cardboard of any kind, or packing materials; NO cardboard edge guards or ring document tubes; they contain non-recyclable additives, such as adhesives and glue.

CARDBOARD CONTAINER

- Corrugated cardboard
- Brown paper bags

NEWSPAPER CONTAINER

- Newspaper
- Newspaper inserts

OFFICE PAPER CONTAINER

- Paper—white and pastel-colored

ALL OTHER RECYCLABLES (MIXED) CONTAINER

- Aluminum, steel, and clean aluminum foil
- Aerosol cans (empty)
- Plastics # 1 - # 7
- Glass bottles and jars
- Plastic bottles and caps
- Plastic margarine tubs and yogurt containers
- Paper milk carton and juice containers without foil inside
- Paperboard (tissue boxes, cereal boxes, paper egg cartons, toilet paper and paper towel cores, shoe boxes, 6 or 12-pack beverage cartons)
- Catalogs, magazines, brochures, and phone books

Please do not contaminate!

We **DO NOT TAKE**:

- Styrofoam®
- Plastic bags of any kind
- Shredded paper
- Containers five gallons or larger

RECYCLING GUIDELINES

PAPER & CARDBOARD

CONTAINERS
EMPTY & RINSE, DO NOT FLATTEN

PLASTIC BOTTLES, TUBS, JUGS, JARS
EMPTY & RINSE, DO NOT FLATTEN

PAPEL Y CARTÓN

ENVASES
VACÍE Y ENJUAGUE, NO LOS APLANE

BOTELLAS, JARRAS, FRASCOS, RECIPIENTES PLÁSTICOS
VACÍE Y ENJUAGUE, NO LOS APLANE

When in doubt, give us a shout! ¡Si tiene alguna duda, comuníquese con nosotros!

NO PLASTIC BAGS NO BOLSAS PLÁSTICAS

Why Focus on Contamination?

National Sword & Market Disruption

- Drop in commodity value & market demand ultimately resulting from excess contamination
- New bale standards at MRFs (0.5% contamination limit for export)

Human Health & Environmental Impacts

- MRF fires (batteries)
- Worker exposure (used needle sticks)
- Prohibited materials (hazardous waste)

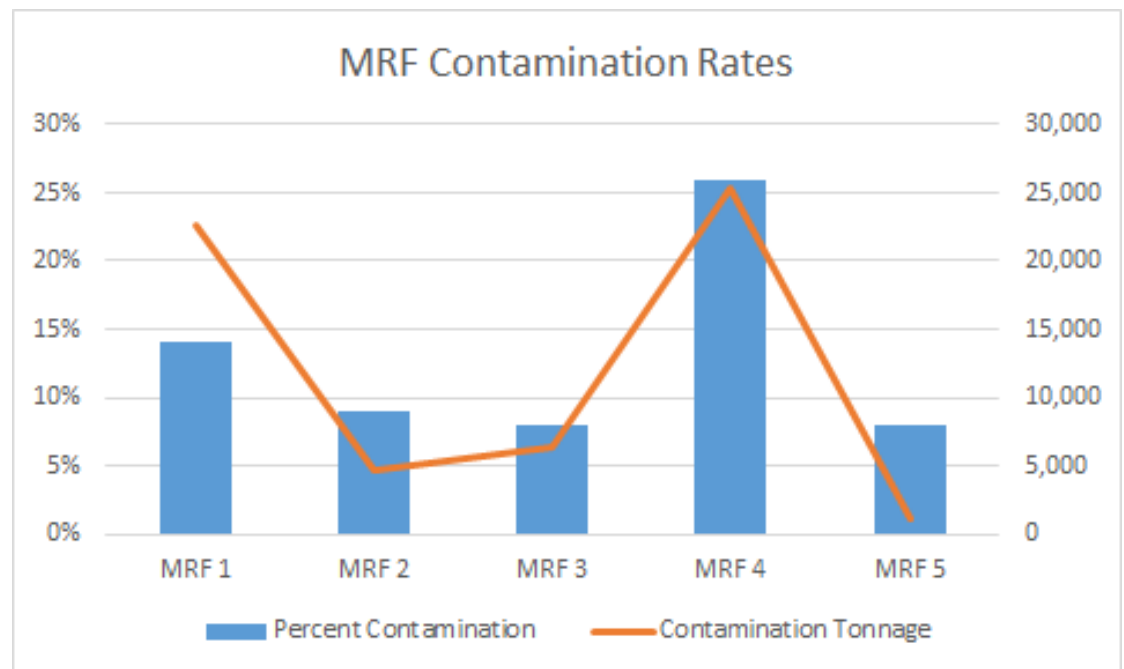
Regulatory Compliance

- Stockpiling / 75% turnover rate requirement
- Offsite odors and nuisance conditions (food/liquid contaminants)



Contamination Rates in Colorado

- Over 60,000 tons sent for landfill disposal from five single stream Material Recovery Facilities!
- Contamination negatively impacts the state diversion rate and progress towards waste diversion goals:
- What are the top contaminants MRF operators are dealing with?



Contamination Survey



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- Survey sent to 22 MRF's and 12 responded.

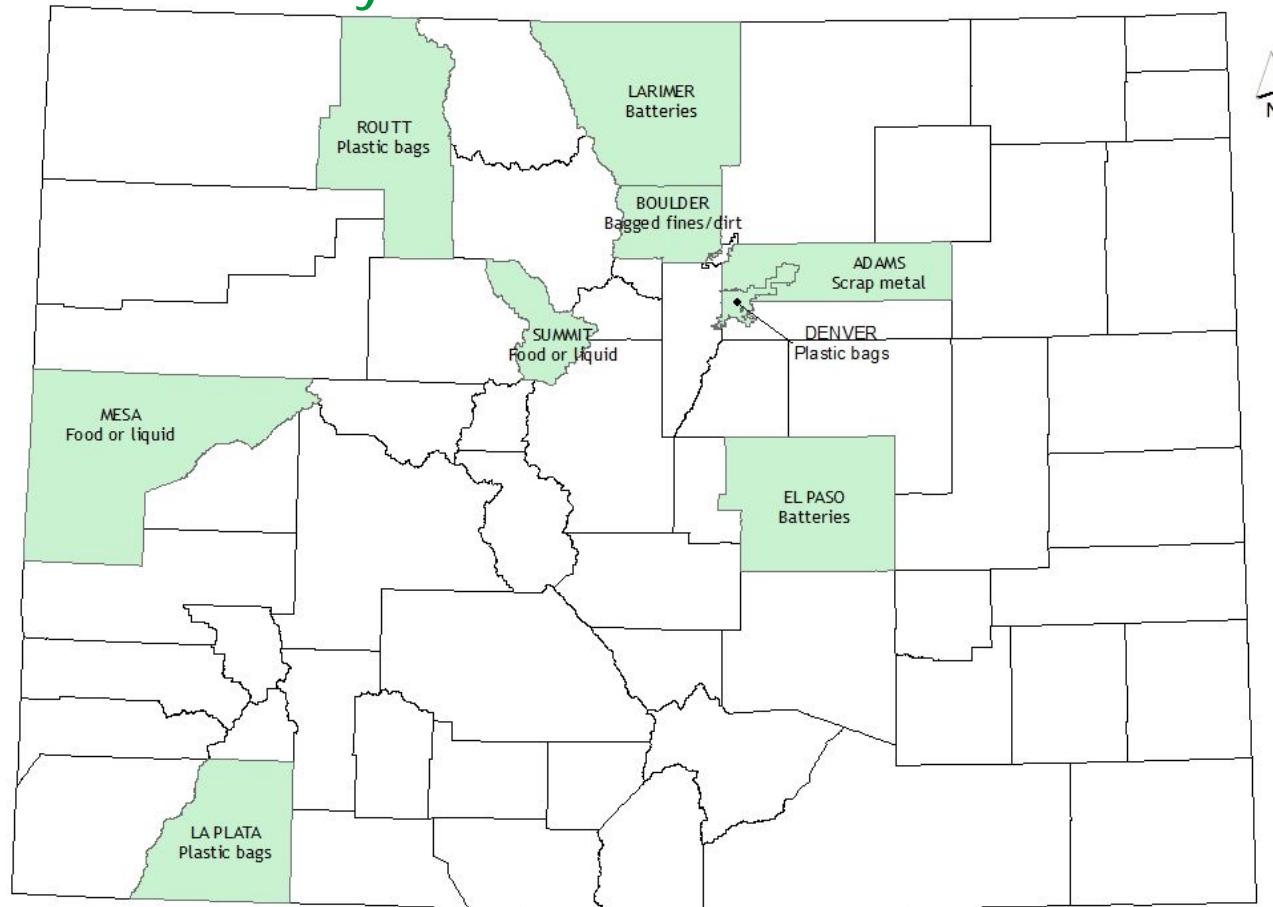
We asked facilities to:

- "Rank the top 5 unacceptable items that are causing the most problems in your facility"



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Contamination Survey Results



Counties of MRF survey respondents with the top contaminants



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Contamination Survey Results

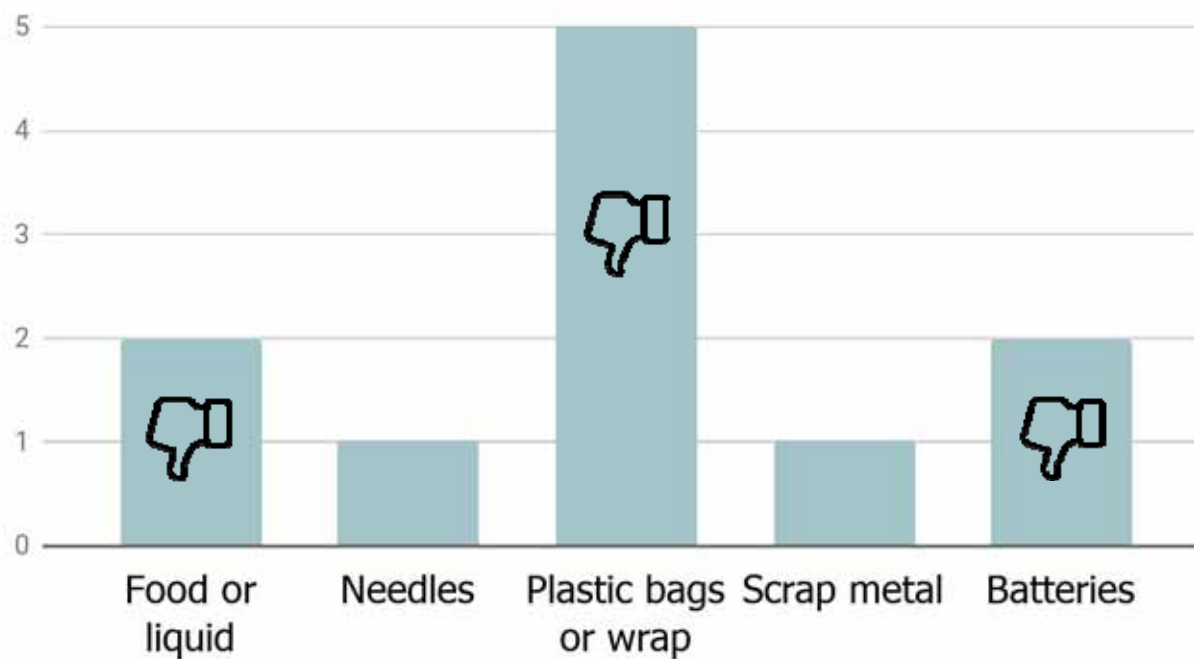


Figure 1: Materials ranked as the most problematic for facilities



Contamination Survey Results

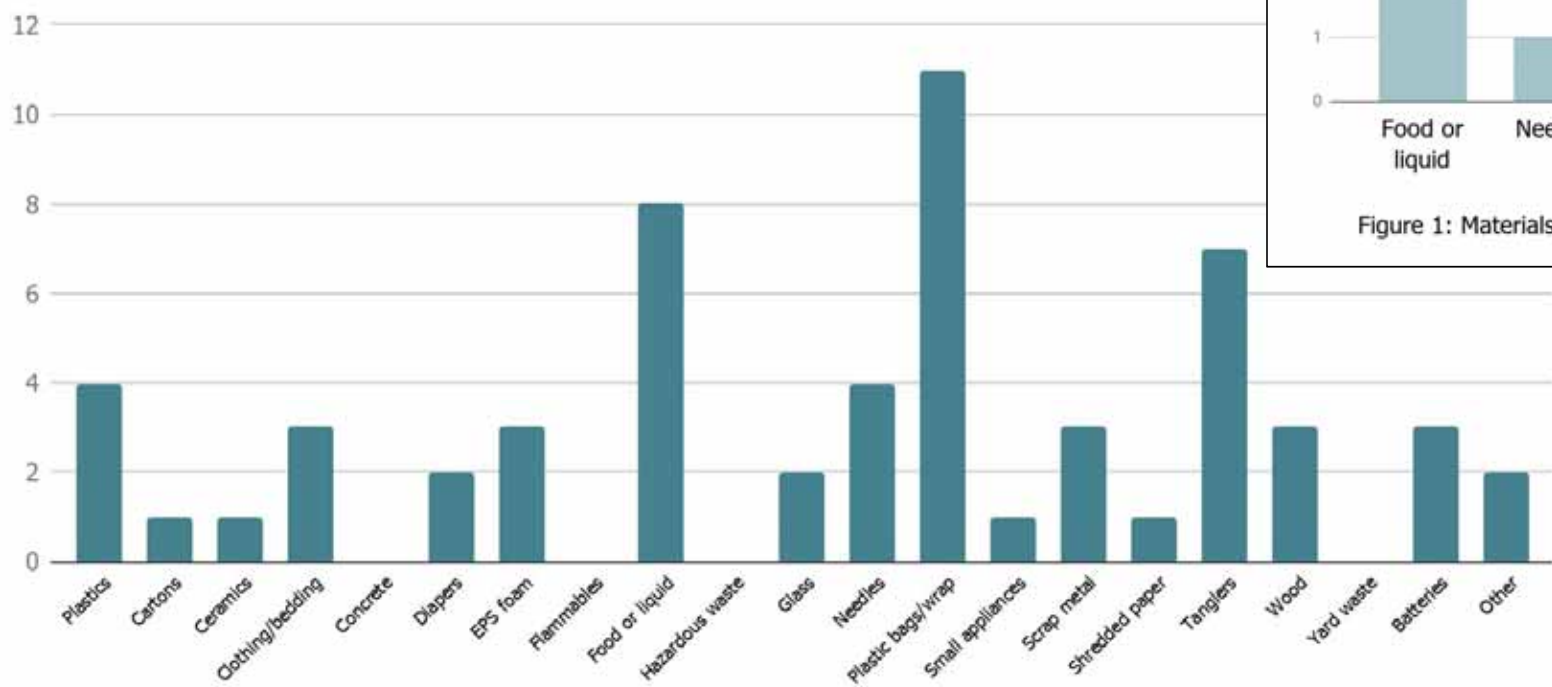


Figure 2 : Contaminants (combined from Top 5 rankings per facility)

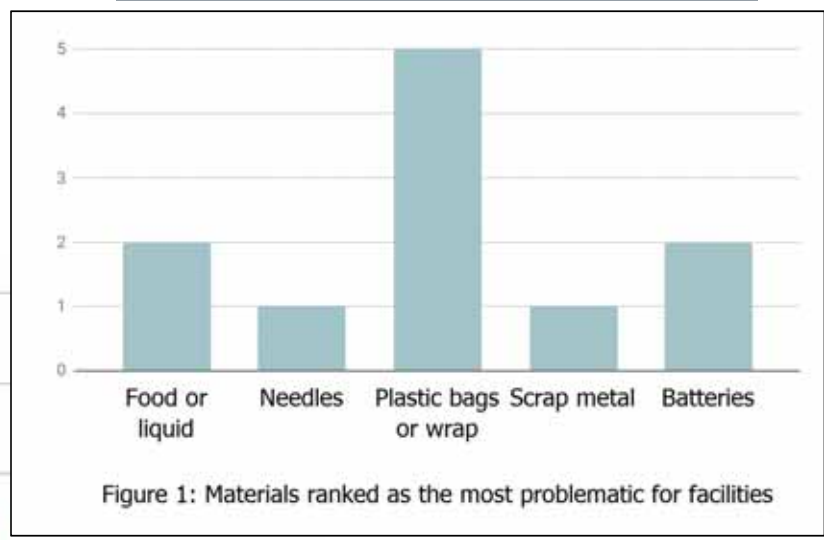
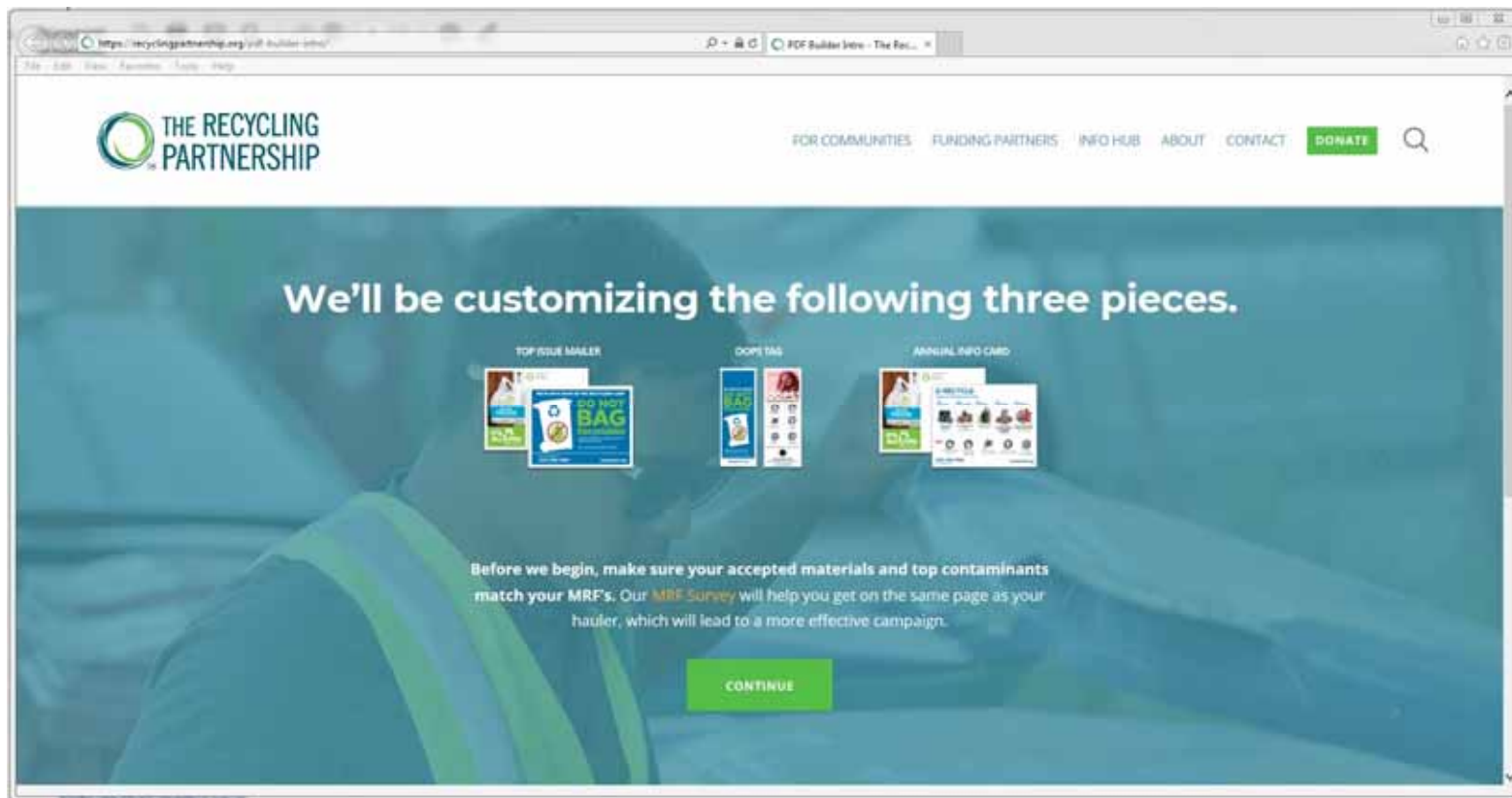


Figure 1: Materials ranked as the most problematic for facilities



Free Outreach Materials



1. Top issue mailer
2. Oops tag
3. Annual info card

<https://recyclingpartnership.org/pdf-builder-login/>



Free Outreach Materials



NO FOOD OR LIQUID IN THE CART

EMPTY ALL CONTAINERS BEFORE RECYCLING.

Food and liquid can ruin other recyclables.



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NO PLASTIC BAGS IN THE RECYCLING CART



DO NOT BAG
Recyclables

Collecting recyclables in a bag? Empty the contents into the cart.

 Return plastic bags to retailers.



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CDPHE specific questions?

