

State of Oregon Department of Environmental Quality Recycling Material Acceptance Lists: Qualitative Evaluation Results Summary

Plastic Pollution and Recycling Modernization Act (SB 582, 2021) Rulemaking Advisory Committee Meeting 3 of 5, Rulemaking 1 Updated Nov. 22, 2022

At the Nov. 9, 2022 meeting of DEQ's Rulemaking Advisory Committee for Recycling Modernization Act 2023 Rules, DEQ was asked to provide documentation which cross-references DEQ's qualitative evaluation of materials and statutory criteria against DEQ's initial proposed placement of materials on recycling acceptance lists. This document is designed to satisfy that request. It duplicates Figure 2 from the rule concept: <u>Recycling Material Acceptance Lists (part 1)</u> and adds three details and updates to Figure 2 (below).

- 1. A new column indicates if a portion or all of a material evaluated is on either (or both) of DEQ's proposed recycling acceptance lists, is still under evaluation, or is not recommended for inclusion and no longer under consideration.
- 2. Color coding is added to provide a visual aid.
 - Yellow rows are those where the material (or a fraction of the material, if identified) is included in the Recycling Material Acceptance Lists (part one) rule concept recommendation for the Local Government Recycling Acceptance List.
 - Blue rows are similarly associated with the Producer Responsibility Organization (PRO) Recycling Acceptance List.
 - Green rows are included in both.
 - Rows in pink represent materials still under evaluation.
 - White rows are materials not recommended for inclusion at this time.
- 3. The materials recommended for inclusion or are still under consideration with scores of 1-3 (on a scale of 1-5) are highlighted with more intense colors and bold font.

Please refer to Appendix 1 of the aforementioned rule concept for additional information about individual criteria and the evaluation rubric. In summary, scores of 4 or 5 are generally positive; scores of 1 and 2 are generally negative; and scores of 3 are neutral against the stated criteria, potentially due to the presence of both positive and negative considerations. Also note that environmental and economic considerations are being evaluated separately.

Generally speaking, materials with scores of 3 or higher against all criteria were easily justified for inclusion in acceptance lists. Some recommended materials score a "1" or "2" against some criteria and in these cases, they were recommended for inclusion only where DEQ established that these detriments can be mitigated through elements of the Recycling Modernization Act, and/or are offset by other benefits (including environmental benefits, some of which are assessed separately). In all cases, DEQ has only recommended materials for inclusion if there are viable responsible markets, the material can be recycled effectively, and there are environmental benefits associated with the recycling activity. DEQ intends to share additional information regarding selected materials at a later date.

Criteria-)														
	Stability and maturity of responsible end markets	Accessibility of responsible end markets	Viability of responsible end markets	Compatibility with existing recycling infrastructure: commingled collection and processing	with existing recycling	Amount of material available	Practicalities of sorting	Practicalities of storing	Contamination	Ability for waste generators to easily identify and properly prepare material	safoty	Policy in ORS 459.015(2)(c)	Other	Acceptance List?
Old corrugated containers (OCC) – uncoated, ex. pizza boxes	5	5	5	5	5		5	4	4	4	5	4		Local Government (on- route, depot, Uniform Statewide Collection
Pizza boxes	5	5	5	5	5	5	5	4	3	4	5	4		List): "Corrugated cardboard: uncoated or coated with recycle- compatible coating. Includes pizza boxes."
Old corrugated containers (OCC) – wax coated, not recycle compatible (as paper)	3	2	2	1	2	4	1	3	1	3	4	NE		Not recommended for acceptance
Old corrugated containers (OCC) – other coated, recycle compatible	5	5	5	5	5	5	5	4	4	4	5	4		Local Government (on- route, depot, USCL): "Corrugated cardboard: uncoated or coated with recycle-compatible coating. Includes pizza boxes."
Single-wall kraft packaging (e.g., grocery bags)	5	5	5	5	5		5	4	5	5	5	4		Local Government (on- route, depot, USCL):
Other multi-layer kraft packaging (e.g., paper padded mailers)	5	5	5	5	5	5	5	4	5	3	5	4		"All kraft paper (such as paper bags, mailers)
Non-poly coated paperboard packaging (e.g., cereal, cracker, cosmetic, medicine boxes)	4	4	5	5	5	5	5	4	4	4	3	4		Local Government (on- route, depot, USCL): "Uncoated paperboard packaging (e.g., cereal, cracker, and medicine boxes)"
Molded pulp packaging (e.g., egg cartons, other protective packaging)	5	5	5	5	5	5	5	4	4	5	3	4		Local Government (on- route, depot, USCL): "Molded pulp packaging (but not food serviceware)"
Molded pulp food serviceware (e.g., take-out "clamshells")	1	2	1	3	4	NK	5	3	1	2	3	4		Not recommended for acceptance
Gable-top and aseptic cartons (in mixed paper bale)	3	3	3	4	5	3	4	4	4	4	2	4		Local Government (on- route, depot, USCL):
Gable-top and aseptic cartons (in Grade 52 bale)	3	2	3	3	5	3	2	3	4	4	2	4		"Polycoated cartons (e.g., milk cartons),

Criteria .)														
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Paper cups, coated and uncoated (in mixed paper bale)	3	3	3	4	5	3	3	4	3	4	2	4		Aseptic cartons, and polycoated paper cups"
Paper cups, coated and uncoated (in Grade 52 bale)	3	2	3	3	5	3	2	3	3	4	2	4		
Other polycoated packaging (e.g., some freezer and butter boxes, poly-lined deli wrap, animal feed bags) (in mixed paper bale)	2	2	2	4	5	NK	4	4	4	4	2	4		Not recommended for acceptance
Other polycoated packaging (e.g., some freezer and butter boxes, poly-lined deli wrap, animal feed bags) (in Grade 52 bale)	2	2	2	3	5	NK	2	3	4	4	2	4		Not recommended for acceptance
Other polycoated or clay coated food serviceware (e.g., take-out boxes, food boats, paper plates) (in mixed paper bale)	1	2	1	2	3	NK	2	2	1	3	2	4		Not recommended for acceptance
Other polycoated or clay coated food serviceware (e.g., take-out boxes, food boats, paper plates) (in Grade 52 bale)	1	2	1	2	3	NK	1	2	1	3	2	4		Not recommended for acceptance
Tissue paper (packaging)	5	5	5	5	5	NK	4	4	4	4	3	4		Local Government (on- route, depot, USCL): "Tissue paper (packaging, not sanitary)"
Non-metalized gift wrap	5	5	5	5	5	NK	4	4	2	2	3	4		Local Government (on- route, depot, USCL): "Non-metalized gift wrap"
High-grade office paper (uncoated)	5	5	5	5	5	4	5	4	5	5	4	4		Local Government (on- route, depot, USCL): "High-grade office paper"
Newspaper, newsprint	5	5	5	5	5	5	5	4	5	5	4	4		Local Government (on- route, depot, USCL): "Newspaper/newsprint"

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Magazines and other coated paper (e.g., catalogs)	4	4	5	5	5	5	5	4	4	5	3	4		Local Government (on- route, depot, USCL): "Magazines, catalogs and similar glossy paper"
Telephone directories	4	4	5	4	5	5	4	4	5	5	3	4		Local Government (on- route, depot, USCL): "Telephone directories"
"Low grade" printing and writing paper (e.g., bulk mail, envelopes)	4	4	5	5	5	5	5	4	4	5	3	4		Local Government (on- route, depot, USCL): "other printing and writing paper (e.g., envelopes, "junk mail", cards)"
Shredded paper	5	5	5	2	5	2	2	4	3	5	3	4		PRO Recycling Acceptance List: "Shredded paper"
Hardcover books (collected commingled)	4	4	4	2	N/A	2	2	4	4	5	3	4		Not recommended for acceptance
Paperback books	4	4	5	5	5	NK	5	4	4	5	3	4		Local Government (on- route, depot, USCL): "Paperback books"
Clear PET bottles ≥ 6 ounces	5	5	5	5	5	5	4	4	4	4	4	5		Local Government (on- route, depot, USCL): "Plastic bottles and jugs , 6 ounces and larger: PET (#1) (clear only); natural and colored HDPE (#2) and LDPE (#4); clear and colored PP (#5)."
Clear PET other packaging, not thermoform (e.g., jars) ≥ 6 ounces	5	5	5	5	5	4	4	4	3	4	3	5		Local Government (on- route, depot, USCL): " Plastic tubs (e.g., cottage cheese), 6 ounces and larger: PET (#1), HDPE (#2), LDPE (#4), and PP (#5)"
Pigmented/opaque PET containers (including black PET) \geq 6 ounces	2	2	2	2	2	NK	2	3	3	3	2	5		Not recommended for acceptance

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Material:	Stability and maturity of responsible end markets	Accessibility of responsible end markets	end markets	Compatibility with existing recycling infrastructure: commingled collection and processing	Compatibility with existing recycling infrastructure: separated material collection	Amount of material available	Practicalities of sorting	Practicalities of storing	Contamination	generators to	Environmental health and safety considerations	Policy in ORS	Other	Acceptance List?
Clear PET thermoform packaging, not food serviceware (e.g., produce boxes, egg cartons)	3	3	4	3	5	4	3	4	3	3	3	5		Tubs included in "Plastic tubs" (largely due to challenges for users in identifying thermoforms), other formats (produce boxes, egg cartons) not included and still under evaluation.
Natural HDPE bottles <u>></u> 6 ounces	5	5	5	5	5	4	4	4	4	4	4	5		Local Government (on- route, depot, USCL): "Plastic bottles and jugs , 6 ounces and
Colored HDPE bottles ≥ 6 ounces	4	5	4	5	5	4	4	4	4	4	3	5		larger: PET (#1) (clear only); natural and colored HDPE (#2) and LDPE (#4); clear and colored PP (#5)."
Natural HDPE tubs and containers ≥ 6 ounces	5	5	5	5	5		4	4	4	4	4	5		Local Government (on- route, depot, USCL): " Plastic tubs (e.g., cottage cheese), 6
Colored HDPE tubs and containers ≥ 6 ounces	4	5	4	5	5	4	4	4	4	4	3	5		ounces and larger: PET (#1), HDPE (#2), LDPE (#4), and PP (#5)"
HDPE pails and buckets	4	5	4	3	5	3?	3	4	3	4	3	5		Local Government (on- route, depot, USCL) AND PRO Recycling Acceptance List:" Plastic buckets, pails, storage containers and other packaging that fits loosely in the generator's provided on-route collection container: HDPE (#2) and PP (#5)"

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Bulky HDPE packaging/products ¹ (e.g., laundry baskets, coolers, large toys and children's furniture) (Note: products not a "covered product")	4	5	4	3	5		3	4	4	3	3	5		(Storage containers only; may be considered packaging): Local Government (on- route, depot, USCL) AND PRO Recycling Acceptance List:" Plastic buckets, pails, storage containers and other packaging that fits loosely in the generator's provided on-route collection container: HDPE (#2) and PP (#5)"
HDPE squeezable tubes (e.g., Colgate toothpaste [new], lotions/sunscreens)	4	5	4	2	5	NK	2	4	2	3	3	5		Not recommended for acceptance
LDPE rigid containers (not film) ≥ 6 ounces	4	4	4	2	5	1	2	4	4	4	3	5		Local Government (on- route, depot, USCL): " Plastic tubs (e.g., cottage cheese), 6 ounces and larger: PET (#1), HDPE (#2), LDPE (#4), and PP (#5)"
Other LDPE containers (not film) (e.g., squeezable bottles, tubes) ≥ 6 ounces	4	4	4	2	5	NK	2	4	2	3	3	5		Not recommended for acceptance
PP bottles ≥ 6 ounces	4	4	5	4	5	1	4	4	5	4	3	5		Local Government (on- route, depot, USCL): "Plastic bottles and jugs , 6 ounces and larger: PET (#1) (clear only); natural and colored HDPE (#2) and LDPE (#4); clear and colored PP (#5)."

¹ Referred to as "products" in the original rule concept but storage containers meet the definition of packaging.

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PP tubs and other containers ≥ 6 ounces	4	4	5	4	5	4	4	4	4	4	3	5		Local Government (on- route, depot, USCL): " Plastic tubs (e.g., cottage cheese), 6 ounces and larger: PET (#1), HDPE (#2), LDPE (#4), and PP (#5)"
PP thermoforms, not food serviceware	4	4	5	4	5	3	4	4	3	3	3	5		Local Government (on- route, depot, USCL): " Plastic tubs (e.g., cottage cheese), 6 ounces and larger: PET (#1), HDPE (#2), LDPE (#4), and PP (#5)"
PP paint cans, empty and dry	4	3	4	4	5	NK	4	4	3	3	3	5		Local Government (on- route, depot, USCL) AND PRO Recycling Acceptance List:" Plastic buckets, pails , storage containers and other packaging that fits loosely in the generator's provided on-route collection container: HDPE (#2) and PP (#5)"
Bulky other PP packaging/products ² (e.g., storage containers, laundry containers, outdoor furniture) (Note: not all "covered products")	4	4	5	3	5	4	3	4	4	3	3	5		(Storage containers only; may be considered packaging): Local Government (on- route, depot, USCL) AND PRO Recycling Acceptance List:" Plastic buckets, pails, storage containers and other packaging that fits loosely in the generator's provided on-route collection container: HDPE (#2) and PP (#5)"

² Referred to as "products" in the original rule concept but storage containers meet the definition of packaging.

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Non-bulky other PP products (e.g., DVD cases, kitchenware) (Note: not all "covered products")	4	4	5	1	5		1	4	3	3	3	5		Not recommended for acceptance
Natural and colored PS packaging, excluding food serviceware, EPS (e.g., CD cases)	3	3	3	2	5	NK	2	4	4	4	3	SV		Not recommended for acceptance
HDPE colored nursery containers (e.g., pots, trays, etc.)	3	4	3	3	5	NK	3	4	4	4	3	5		Still under evaluation: "Nursery (plant) packaging (e.g., pots, trays)"
LDPE colored nursery containers (e.g., pots, trays, etc.)	3	2	3	3	5	NK	3	4	4	4	3	5		Still under evaluation: "Nursery (plant) packaging (e.g., pots, trays)"
PP colored nursery containers (e.g., pots, trays, etc.)	3	4	3	3	5	NK	3	4	4	4	3	5		Still under evaluation: "Nursery (plant) packaging (e.g., pots, trays)"
PS colored nursery containers (e.g., pots, trays, etc.)	2	2	2	2	5	NK	2	4	4	4	2	SV		Still under evaluation: "Nursery (plant) packaging (e.g., pots, trays)"
Tub and container lids, e.g. yogurt container lids (multiple resins)	4	4	4	1	5	2	2	4	5	5	3	5		Still under evaluation "PE and PP lids"
Tub and container lids, e.g. yogurt container lids <u>co-</u> <u>collected with bottle caps</u> (multiple resins)	4	4	4	1	5	NK	2	3	4	5	3	5		Not recommended for acceptance (caps recommended to be screwed back onto bottles)
HDPE 6-pack carriers (e.g., PakTech) (not LDPE ring carriers)	4	5	4	2	5	1	2	4	4	4	3	5		Still under evaluation: "HDPE package handles (e.g., 6-pack handles)"
Mixed resins small containers < 6 ounces	3	3	3	2	4	NK	1	2	3	3	3	5		Not recommended for acceptance
Expanded PS: block and sheet foam	2	2	2	1	3	3	1	2	3	4	3	SV		PRO Recycling Acceptance List: "Block white expanded polystyrene"
Expanded PS: packing peanuts	1	1	1	1	3		1	2	2	2	3	SV		Not recommended for acceptance

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Expanded PS: other packaging and products, excluding food serviceware (e.g., coolers) (some not a covered product)	2	2	2	1	3		1	2	2	3	2	SV		Not recommended for acceptance
PE block or sheet foam	2	2	2	1	3	NK	1	3	4	3	3	5		Not recommended for acceptance
PE film and wrap (post- industrial, post-commercial, post-consumer)	4	4	4	1	5	5	1	3	3	3	3	SV		PRO Recycling Acceptance List: "Polyethylene film"
PP film and wrap	2	2	2	1	4	NK	1	4	3	3	2	5		Not recommended for acceptance
Woven PP bags (e.g., rice bags)	3	3	3	1	4	NK	1	4	4	5	3	5		Not recommended for acceptance
Multimaterial films, pouches, other flexible packaging	1	1	1	1	4	3	2	3	2	2	2	3		Not recommended for acceptance
Clear cups: PET thermoforms	3	3	4	3	5	2	3	4	3	3	3	5		Local Government (on- route, depot, USCL): "Clear plastic cups: PET (#1) and PP (#5)"
Clear cups: PP thermoforms	5	4	5	4	5	3	4	4	3	3	3	5		Local Government (on- route, depot, USCL): "Clear plastic cups: PET (#1) and PP (#5)"
Clear cups: clear PS	3	3	3	2	5	NK	2	4	3	3	3	SV		Not recommended for acceptance
Cups: rigid PS (not clear)	3	3	3	2	5	NK	2	4	3	3	3	SV		Not recommended for acceptance
Other FSW: PET thermoforms	3	3	4	3	4	4	3	3	2	2	3	5		Not recommended for acceptance
Other FSW: PP thermoforms	5	4	5	4	4	3	4	3	2	2	3	5		Not recommended for acceptance
Other FSW: expanded polystyrene	2	2	2	1	4	NK	1	3	2	2	3	SV		Not recommended for acceptance
Aluminum beverage cans	5	4	5	5	5	4	5	5	4	5	4	5		Local Government (on- route, depot, USCL): "Aluminum food and beverage cans"
Aluminum foil and pressed foil products (e.g., roasting pans)	5	4	5	3	5	4	3	4	3	2	4	5		PRO Recycling Acceptance List: "Aluminum foil and pressed foil products"

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Steel (tin) and bi-metal cans	5	5	5	5	5	5	5	5	4	5	4	4		Local Government (on- route, depot, USCL): "Steel and bi-metal cans"
Metal aerosol cans (should be empty)	5	5	5	3	5	4	4	4	2	4	2	4		PRO Recycling Acceptance List: "Steel and aluminum aerosol packaging"
Steel paint cans (non- aerosol), empty	5	4	5	5	5	NK	5	5	3	4	4	4		Local Government (on- route, depot, USCL): "Steel and bi-metal cans, including empty and dry metal paint cans"
Large appliances/"white goods" with refrigerants (e.g., refrigerators, air conditioners)	4	4	4	1	4	5	1	5	1	4	2	4	5	Still under evaluation: "Large metal appliances (e.g., refrigerators)"
Large appliances/"white goods" without refrigerants (e.g., stoves, hot water heaters, clothes washers and dryers)	4	4	4	1	5	5	1	5	1	4	3	4		Still under evaluation: "Large metal appliances"
Scrap metal (smaller than 30 inches and less than 30 pounds), including small metal pieces (e.g., lids, screws and nails – to be collected inside a metal can which has been crimped tightly closed)	4	4	4	2	4	5	2	5	3	2	2	5		Local Government (on- route, depot, USCL): but only a subset of materials listed here. "Scrap metal less than 10 pounds in weight and 18" in length – no sharp items (e.g., knives) or "tanglers" (bicycle chains, wire, etc.). Others on Local Government depot list only.
Other scrap metal larger than 30 inches or more than 30 pounds	4	4	4	1	4		2	5	3	2	2	5		Local Government (depot only): "Other scrap metal"
Single-use propane cylinders (should be empty)	3	3	3	1	3	NK	1	4	2	2	2	4		Still under evaluation: "Single-use propane canisters"
Glass bottles and jars	5	5	5	2	5	5	2	4	3	5	5	4		Still under evaluation: "Glass packaging"

Criteria- > Material:	Stability and maturity of responsible end markets	Accessibility of responsible end markets	Viability of responsible end markets	with existing recycling	recycling	Amount of material available	Practicalities of sorting	Practicalities of storing	Contamination	easily identify	Environmental health and safety considerations	Policy in ORS	Other	Acceptance List?
Motor oil	4	4	4	1	5	5	1	2	2	4	2	2	5	Local Government (depot only): "Motor oil"
Paper "cans" with steel ends (to steel mill)	3	3	3	4	4	2	4	4	4	4	4	4		Still under evaluation: "Paper "cans" with metal ends (e.g., coffee, nuts or snacks canisters)"
Paper "cans" with steel ends (to paper mill)	3	3	2	2	4		2	4	4	4	4	4		Still under evaluation: "Paper "cans" with metal ends (e.g., coffee, nuts or snacks canisters)"

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