

Meeting Summary



State of Oregon
Department of
Environmental
Quality

Recycling Modernization Act Materials Lists Technical Workgroup

Tuesday, July 19, 2022
Zoom

List of Technical Workgroup Members in Attendance

- Brian May
- Dan Weston
- Dave Claugus
- Dave Larmouth
- Dave Lefebvre (for Nicole Willet)
- David McCall
- Jerry Powell
- Jill Hrycyk (for Rosalynn Greene)

- Joel Baxter (for Wayne Jackson)
- Kim Holmes
- Laura Leebrick
- Liz Bedard
- Steve Miller

DEQ project staff (participating)

- David Allaway
- Justin Gast
- Nicole Portley
- Peter Canepa

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Time	Topic
8:00 a.m.	<p>Welcome, review agenda, meeting logistics</p> <p>Justin Gast welcomed and thanked Technical Workgroup members. He then explained the agenda and who was subbing for members during the meeting. Justin concluded the opening with a reminder that public comment will be happening at the end of the meeting.</p>
8:05 a.m.	<p>Facilitated discussions – follow-up to questions from workgroup members:</p> <p>David Allaway responded to questions recently received from workgroup members. A summary of discussions:</p> <ul style="list-style-type: none">• <i>What is the definition of a “covered product”?</i> By statute, a covered product is any packaging, printing and writing paper, or food serviceware item that is not exempted in the Act. A key takeaway is that the exclusion of a covered product from any of the recycling acceptance lists does not change its status as a covered product. Not all covered products will be recycled.• <i>Who sets the recycling acceptance lists and determines the collection method types for lists- on-route, depot, mobile collection events?</i> The Environmental Quality Commission (EQC) will determine which materials local governments will have to provide collection for, and which of those materials are suitable for on-route collection and depot collection (one or both), as well as which materials are suitable for commingling (the uniform statewide collection list) vs.

	<p>must be collected separately. The EQC will also identify which covered products the PRO(s) will be required to provide recycling opportunities for.</p> <ul style="list-style-type: none"> • <i>Convenience standards, performance standards, target goals for PROs?</i> The PROs will be held to convenience and performance standards, and target goals for the list of materials that the EQC determines the PRO(s) will be required to collect for recycling. • <i>What are the mechanisms for including/excluding items from the material acceptance lists?</i> There are several different mechanisms for both “on-ramps” and “off-ramps.” For “on-ramps,” one method will be through future and/or additional rulemakings. Another will be through the program plans the PRO(s) submit to DEQ. A third way will be through additional recycling services provided by PRO(s) as needed to meet the mandatory plastic packaging recycling goals in the Act. “Off-ramps” are like “on-ramps” in reverse. A material could be removed from a list through rule making. If a material was added via the PRO program plan, it could be removed by the PRO proposing its removal, and DEQ approval. <p>David Allaway then provided an update regarding DEQ’s preliminary thinking for these lists. DEQ will follow the statutory requirements, and the criteria stated in statute are considerations, not a hard pass/fail system. DEQ expects the lists to evolve over time, especially as technology improves, and those changes will involve a robust public process. DEQ also recognizes that adjustment periods are necessary for evolving acceptance lists and that there are challenges involved with adding and removing items from a list. Lastly, DEQ views depots as a means to see if certain materials might be good candidates for eventual inclusion in on-route collection; however, being designated as a depot material is not a guarantee of eventual commingled status. Feedback from the group included a question regarding taking regionality into consideration when making the lists, which is something the EQC may decide to do.</p>
8:30 a.m.	<p>Presentation and facilitated discussions on “responsible end markets” and draft rule concepts for ORS 459A.896(2).</p> <p>David began by providing background information and context regarding how DEQ is interpreting the requirements for responsible end markets, since it is known that not all end markets are equal and choosing between end markets has the potential for significant differences in environmental outcomes. He then explained the differences between the old “solid waste management” hierarchy and the new “materials management” hierarchy. Next discussed were the obligations regarding end markets of the PRO(s) and commingled recycling processors, and how they differ. David then paused for questions and feedback. Most discussion here revolved around how economics fit into the new hierarchy. Nicole Portley was then introduced and began the discussion for the first three rule concepts, and David discussed the fourth rule concept.</p>

	<p>Rule concepts:</p> <ul style="list-style-type: none"> • <i>Definition of “end market”</i> will be defined on a material basis since recycling pathways are material specific. Nicole then went through proposed “end market” definitions for glass, metals, plastics, and paper. • <i>Standards for “responsible end markets”</i> DEQ has identified four elements that make up the proposed standard for “responsible”: compliant, transparent, environmentally-sound, and achieving adequate recycling yields. • <i>Reporting, auditing and enforcement</i> Both the PRO(s) and the processors will have to submit quarterly disposition reports to DEQ. There are additional proposed auditing measures that would make sure the disposition reports are accurate. • <i>Definition of “practicability”</i> There are three elements. First, there are specific actions the PRO(s) could take to be “practicable”; one example is providing financial support to redirect materials to a different end market. Second, “Impracticable” requires technical barriers that cannot be overcome or transactional costs that aren’t justified (given resulting societal benefits). Third, DEQ is required to critically evaluate any claim that a remedy is not practicable, and if DEQ agrees with that claim, to then initiate a review of the materials acceptance lists to consider removing the material. <p>Discussions with workgroup members occurred after each rule concept was introduced. Topics of discussion included the role of economic considerations in decision making and the proposed definition of “practicable”; open-loop vs. closed-loop recycling; alignment with FDA standards for plastic; transparency of information around end markets and worries of fraud and material yields; what auditing could look like; needs and concerns for MRFs around responsible markets and the hazards of restricting movement of material; potential use of third party certification; and concerns/thoughts around international and domestic end markets.</p>
9:45 a.m.	Short break
9:50 a.m.	<p>Review of changes to evaluation matrix from 4/28 and 5/31 meetings.</p> <p>David pointed out that there were some changes made to the evaluation, largely in response to comments shared at 4/28 and 5/31 meetings. He invited feedback on all changes and then focused discussion on a few specific materials:</p> <ul style="list-style-type: none"> • <i>Aerosol cans</i>- Justin Gast recapped past group concerns and discussions, and shared insight DEQ received from conversations with processors, scrap metal recyclers, Recycle BC and British Columbia provincial government. The main issue with aerosols centers around hazardous vs non-hazardous sealed containers and the proper collection method for such containers, which are covered products under the Recycling Modernization Act. Justin noted that DEQ is considering recommending this material be collected at depots. There was a group discussion including addressing what makes an aerosol container “hazardous”.

	<ul style="list-style-type: none"> • <i>Paper “cans” with steel ends</i>- David Allaway talked about paper mills or steel mills being the two different recycling pathways for these containers and how these materials are sorted at MRFs. DEQ estimates that most materials would flow to steel mills, but only around 30% of the material by weight would actually be recycled. He identified a potential trade-off between the environmental benefits of that recycling vs. potential public concerns regarding veracity. There was a robust discussion about public communication and some of the reasons to include or exclude this material. • <i>Hardcover books</i>- Justin Gast noted that MRFs don’t want spines and covers, but the fiber is desirable. Dave Claugus communicated the difficulty of recycling this material at MRFs. Several workgroup members spoke in favor of depot collection and reuse, though Justin informed the group that bound books are not a covered product, thus the PRO has no responsibility to collect such material via depot or take-back collection. • <i>Large-format HDPE and PP packaging (e.g., buckets, pails, trays, crates)</i>- Justin Gast shared that the materials have been problematic for service providers and MRFs and that some in-state MRFs aren’t even recycling the material that’s showing up at their facility, though there are markets for these materials. Justin shared with the group feedback that was captured by workgroup member Kate Eagles, who surveyed several out-of-state MRFs and reclaimers about the material. DEQ is considering that certain-sized material be collected on-route with larger material being collected at depots, though those size thresholds have not been determined. DEQ asked the group to send them their thoughts, questions and feedback regarding this material and how it should be collected.
<p>10:45 a.m.</p>	<p>Presentation/questions on updates to DEQ’s preliminary life cycle assessment of block expanded polystyrene (EPS)</p> <p>Peter Canepa shared updates to DEQ’s preliminary LCA results for EPS, which were presented on in May; DEQ added scenarios to represent a domestic mechanical recycling option in California. In summary, the LCA showed that 1). Convenience of drop-off site location matters, with marginal vs additional transport being a potentially significant variable; 2) When transport distances are large, densification of recovered EPS is justified; 3). Disposition results were mixed. In fact, among other things, the preliminary results showed that domestic end-markets don’t necessarily lead to better environmental outcomes.</p> <p>David then introduced, gave background information on and defined the concept of social costs and “damage cost factor,” which is an estimate of the cost to society associated with a unit of environmental damage based off of different impact categories. David shared the results of applying damage cost factors to the LCA on EPS. That method produces estimates of the social costs/benefits of different scenarios. Once Cascadia Consulting Group provides estimates of transactional costs (September), transactional costs and social costs can be compared.</p> <p>Please see slides for additional details.</p>

11:00 a.m.	<p>Glass packaging</p> <p>Peter Canepa shared the preliminary results of a screening-level life cycle assessment of 56 different scenarios for managing glass at end of life. Please see slides for additional details.</p> <p>Key findings include:</p> <ul style="list-style-type: none"> • The End Market is critical for realizing the benefits of glass recycling. <ul style="list-style-type: none"> – Closed loop recycling is not necessarily better than open loop. • Convenience of drop-off sites matters <ul style="list-style-type: none"> – idea of marginal vs additional transport was an important variable influencing results. – Site density seemed to influence results, though not consistently across impacts and scenarios. – Less transport was required in the Metro region leading to fewer impacts • On-route collection in a dedicated truck led to higher impacts than a combined truck <p>David reiterated that this data is only preliminary and that there is more information that will be added into this research and reported upon in a future September meeting. He also reminded the group that glass bottles and jars have been added to the materials evaluation matrix, and invited feedback on that.</p> <p>Members of the workgroup, and guest Scott DeFife, president of the Glass Packaging Institute, requested the inclusion of additional scenarios, including rail transport to California, and sending glass to a local disposal option such as a landfill.</p> <p><i>Reminder: additional evaluation of glass recycling pathways will be conducted by Cascadia Consulting Group and DEQ and shared at a future Workgroup meeting.</i></p>
12:10 p.m.	Break
12:40 p.m.	<p>Presentation and facilitated discussion: framework for assigning materials to lists and preliminary DEQ recommendations</p> <p>David described the framework for placing materials on an acceptable materials list. He also provided a summary of the lists and who is responsible for each. Next, he stated that DEQ has prepared a first, modest batch of recommended materials, that these lists are drafts, and that these lists are based off future scenarios, not the current system. From there he presented DEQ’s initial recommendations for placement of various materials onto different acceptance lists. He invited feedback on those preliminary (and partial) recommendations.</p>

	<p>Discussion from the workgroup involved, among other things, concerns involving the weight and length limits for scrap metal, given potential impacts on collection and processing operations.</p>
<p>1:00 p.m.</p>	<p>Drop-off/depot user survey</p> <p>David presented the findings of a depot user survey from various regions throughout the state, thanking workgroup members and others for gathering data and noting that additional data from Wallowa County is pending. He reviewed depot user behavior from both depots located at transfer stations and recycling-only depots located in communities throughout Oregon. There appears to be some very significant differences in user transport and behavior based on type of facility and the presence/absence of curbside collection. Please see slides for details.</p> <p>David noted that whole-system scenario modeling currently in process by Cascadia Consulting Group and DEQ will include scenarios that differ with regard to the density (number) of depots in communities. That has the potential of impacting both transactional costs and environmental impacts. Survey data will help DEQ and Cascadia estimate the impacts of user behavior (driving) but one important data point is missing: frequency of trips. David invited workgroup members to participate in and/or recruit participants for a “Delphi method” to generate estimates from individuals familiar with user behavior in a variety of Oregon communities.</p> <p>Group discussion included concerns around lightweight materials collected at depots, potential obstacles around zoning/land use, staffed vs unstaffed depots, contamination, and potential to harmonize collection sites with other EPR programs. Workgroup members also suggested defining “convenience” and that, if possible, DEQ harmonize language around convenience standards relative to each of the state’s EPR programs (electronics, paint, drug take-back, packaging and mattresses).</p>
<p>1:20 p.m.</p>	<p>Broad vs. narrow acceptance of plastics: discussion of potential scenario evaluation, next steps (data gathering)</p> <p>There was a brief discussion around a potential modeling of systems. One option could be to promote a smaller, more precise acceptance list for plastics (e.g., only #1, #2 and #5 bottles and jars), which could result in lower amounts of volume set out/collected but less contamination. The other option could be to push a broader plastics acceptance message (e.g., all plastics containers), which could lead to a higher volume of material collected but could also lead to increased levels of contamination and recovery of materials that have weak or no end-markets and are simply destined for landfill or incineration.</p>
<p>1:30 p.m.</p>	<p>Public input</p> <p>Sabrina Dixon-Ridges of Sonoco noted that their paper/metal “cans” on average contain 50% steel, by weight, and that they usually flow to the container line in a MRF and from</p>

	<p>there to steel recycling. She advocated for accepting them for recycling in order to allow for the greatest environmental benefit. These types of cans are currently collected and recycled (as steel) and recycling this product has not disrupted steel recycling.</p> <p>Neil Menezes of General Mills shared two comments. First, regarding the paper/metal “cans”, public communication is critical. Collecting the material allows for better management; perhaps most fiber is not currently recycled but it might be. Second, he noted that chemical recycling of plastics may be better for food grade applications than mechanical recycling, and asked how that will be factored into the materials management hierarchy.</p>
1:50 p.m.	<p>Next steps and final questions</p> <p>David gave a quick recap of the next steps, including the next two upcoming meetings of this group on August 23rd and September 20th, and starting a discussion on material lists with the state Recycling Council on August 18. The Rulemaking Advisory Committee’s first meeting is July 20th and will include a discussion on responsible end markets.</p> <p>At the August meeting of this workgroup, Jessica Branon-Zwick of Cascadia Consulting Group will present their draft assessment of transactional costs of the current Oregon recycling system. Paired with it will be an analysis from DEQ of the environmental impacts and social costs of that system. Those will provide a baseline against which to compare about 20 different whole-system scenarios in September.</p> <p>Another screening-level LCA, this one looking at different end markets for polycoated cartons and paper cups will also be presented, and a discussion on convenience standards, collection targets, performance standards for materials that PROs are required to collect at drop-off sites.</p> <p>Justin and David wrapped up the meeting by thanking the work group and the general public on the call for being there and for doing great work.</p>
2:00 p.m.	Adjourn

Note: Some times listed above are approximations.

List of other attendees

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|---------------------|-----------------------|--------------------|
| Colette Bazirgan | Travis Comfort | Andrea Fogue |
| Alex Bertolucci | Noelle Bell Copley | Nicholas Georges |
| Abby Boudouris | Shannon Crawford | Brennan Georgianni |
| Maya Buelow | Thomas Cuomo | Alicia Givens |
| Tim Buwalda | Scott DeFife | Laurie Gordon |
| Scott Byrne | Sabrina Dixon-Ridges | Cheryl Grabham |
| Cathy Brown | Maddy Do | Steven Groseclose |
| John Bush | Matt Durbin | Heather Kazmark |
| Patrick Caldwell | Nick Fahey | Scott Keller |
| Pete Chism-Winfield | Christopher Finarelli | Matt Markee |

Angie Marzano
Casey Mellnik
Neil Menezes
Devon Morales
Todd Nash
Roxann Nayar
Gary Panknin
Ally Peck

Carol Patterson
Jason Pelz
Sal Peralta
Paul Rainey
Clarence Rasquinha
Cat Rhoades
Susan Robinson
Greg Ryan

John Salvador
Gretchen Sandau
Samantha Siegner
Vinod Singh
Peter Spendelow
Joyce Thung
Heather Trim
Jill Tucker

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