

WA Commingled Improvements Project: Southwest Region Workgroup

September 24, 2009, Ecology HQ, 9:00 - 12:30

Notes

Focus on Metals in the Commingled System

Responses to Questions on Metals:

Local Governments and Collectors

- **What is the specific messaging for preparation?**
Rinse, no food residue, labels ok (2 jurisdictions), no lids (1) [Auburn: 35lbs 2x2x2x scrap (no wood, metal, plastic attached). Haulers commented that scrap can be a hazard in the truck for compaction (long pipes, etc)].
- **Special/extra messaging?** *No (no message regarding lids, labels, or smashing); Tacoma: cans with dried paint go into the garbage, empty aerosols only, no wire or hangers (try a dry cleaner for reuse)*
- **Collected the same as other materials?** *Yes & with containers only (Shelton)*
- **Does it provide revenue for your program or is it only a cost?**
None seen; no for tin currently; yes for aluminum (aluminum is the cash cow of the curbside program), revenue helps offset costs.
- **Percent of total materials collected in curbside program?**
*Thurston: Tin (magnetic pulled, not large scrap) 3 %, Alum 1.1%; Auburn: Alum 1.9%, Tin 3.4%, scrap .4% (if handpicked it shows as scrap, if it goes through the system it's counted as tin); Olympia: Alum 2.4%, Tin 2.9%; Pierce: Alum 1%, Tin 2%; Tacoma: Alum 1%, Tin 2.6% **Shelton; Lewis:***
- **Discussion of how MRFs measure jurisdiction loads to determine residual/contamination rate**
How MRFs count – average from MRF, not actual. Pierce and Thurston have the same rate (4.3%). MRFs Keep jurisdictions separate (Thurston from Pierce), but not within jurisdictions (Olympia and Thurston). Updated averages based in contract (10 a month in Olympia). MRFs sample a few days a week for one jurisdiction at a time. Only provide updates to the jurisdictions if they ask. Full time sampler on each shift to sample inbound and outbound (SP). Sampling for trends, not actuals. SP can send the data sheets to whoever would like them.
- **What about aerosols cans?**
Problematic on collection side due to insecticide, paint spray mess, and hauler safety.

Processors

- **Percent of total incoming?** 1-2% Alum; 2.5-3.5% Tin
- **Quality of incoming?**
Good other than crushed aluminum cans, and lids. Scrap: ferrous small will get picked up by magnet and sent to tin, non-ferrous large and irregular get caught and cause machine damage (belt damage). Accepting scrap commingled curbside gives the impression they (MRFs) can take everything. Can be an issue with the scrap law theft and ID—Can we legally have scrap metal in the mix?
- **Problems in processing?**
 - *No problem with aerosols.*
 - *Smashed alum cans are a problem (look like paper, not enough surface area to get caught by eddy current—sent to residual, can also get sent to fines and contaminate glass). Tacoma Recycling hand picks so the hockey puck cans aren't as big of a problem (no eddy current); but long-flatten cans get mixed in with paper.*
 - *Lids are an issue (safety for employees, get caught in fines or stick to newspaper) (Check with NORPAC and NIPPON to see if they have a magnet on drum pulper and send cans back to MRF).*
 - *Scrap metal is an issue due to size and weird shape, pipes fling huge safety issue, weight is a huge safety issue on a fast belt, pots and pans are not a problem.*
 - *Foil: smaller than fist ends up as fines, ball up, foil pans get into newspaper. Buyers are buying UBCs not just aluminum—they don't want non-UBC. Cat food cans are ok, not great. Foil has more iron*

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than cans and so thin it just flashes/vaporizes so buyers don't want it, but small percentage they can live with.

- **Areas that could be improved from MRF perspective?**
Don't flatten, leave lids off (Lids not an issue with Tacoma Recycling due to magnetic, but they don't make it to magnet at SP)
- **Percent of residual?**
Crosses into another commodity and gets set out with that bale (paper), or gets pulled off plastics residual rerun and gets baled as metal (SP)
- **Rate the market: Strong, medium, weak for local and export?**
Aluminum is strong, but half of what it was last year. Steel is medium. Aluminum is mostly domestic (Anheuser Busch is reportedly a large consumer). Steel is half domestic and half export.
- **High value commodity?**
Aluminum is absolutely a high value—it pays for the system (\$2,000 a ton, direct to manufacturer; minus \$300-\$400 secondary processing). Tins can are a low value commodity.
- **Easy to move?** *Yes*
- **Pricing note:** Check *Waste News* for pricing then ground-truth with MRFs for use in final report.

Manufacturers

No aluminum end-users were available (Shannon is trying to get e-responses to our questions from Anheuser Busch, who is reportedly buying 70-80% of the aluminum cans in the area)

Nucor Steel

- **Supply?**
99.8% of supply is scrap steel. 87% of their feedstock comes from WA. Curbside residential is small 5-8% (based on weight)
- **Prohibitives?**
Lead, papers (Cause emissions problems due to increased temperature of vapor, increased energy used), plastics (emissions/temperature issue, can tolerate .5 -1% max), non-ferrous, anything that hasn't been processed (already shredded, baled, etc)
- **Outhrows?** *Non-ferrous: Aluminum*
- **Yield loss?**
Labels are undesirable but not enough to refuse a load. Food is not an issue from product quality, but causes vector concerns.
- **Capacity/ Need to use more? ?**
- **Problems with your equipment?**
Both paper and plastics cause problems with the emissions equipment (high temperature destroys the bags in the baghouse that filter the emissions. Expensive to replace. 35'x 8' in size, 3500 in qty). Liquids are a problem as they cause explosions in the melting pot (safety and good neighbor issue).
- **Value in using vs. other virgin feedstock? ?**
- **Final product?** *Make billets to roll or sell worldwide (Rebar 85% and Merchant grade (flats) 15%)*
- **Problem areas?** *Plastics, paper, radiated metals, closed containers (whole) and liquids*

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Reporting Method

Shannon generated a template report sample to showcase our results and received feedback from the group. Joe Bushnell indicated he has a pie chart that would show the general percentage of revenue the commodity brings in. Include market value by commodity line graph over time for historical trend data.

Data still needed from: Olympia (ONP/OCC), Lewis (ONP/OCC, Plastics, Metals), Shelton (ONP/OCC, Metals)

Homework: All - Please bring or send an e-version of your main commingled residential outreach brochure.

Glass Summit

What does the group want out of this meeting?

- 2 half days may be easier for scheduling, however may be disjointed (*full day agreed upon*)
- Glass manufacturers as well as aggregate industry
- Glass Packaging Institute representative
- What happens to our glass and is that ok?
- E-Cullet
- Fibers International
- What are the quality requirements of the aggregate industry?
- Aggregate vs. disposal – costs, environmental benefits
- What are the costs for the hauler to collect glass and into its end use?
- Glass LCAs – Allaway or info
- If you collect glass you get more of everything – still valid? Numbers for contamination?
- How much of the glass goes for disposal if you have to separate it out (Thurston waste study on now). Pierce will be able to get data to compare first qtr 2010.
- St. Cobain
- Russ Lloyd, Federal Way
- Concrete Recyclers, Tumwater
- What does the future look like for glass? Systemic?
- Downcycling – what are we supporting? What is the definition? Is downcycling ok for some materials, but not others? What do we tell the public? What are the goals?

Meeting Schedule

Glass – November 2, 9:00 – 4:00

MWP (*including shred*) – November 19, 9:00 – 12:30

Next Steps – December 17, 9:00 – 12:30