

Meeting Notes: Recorded by Mike Elliott (MassDEP)

NOTE: Copies of the meeting notes and presentation slides are available on the [MassDEP C&D Subcommittee webpage](#). Submit comments via email to michael.elliott@mass.gov.

Agenda

- Welcome
- CY2025 C&D Facility Annual Report Data Analysis
- Recovered Materials Trends
- CY2025 In-State and Out-of-State C&D Facility MPS Status
- Discussion

Welcome/Introductions

MassDEP welcomed participants to the webinar.

- 62 individuals registered for the meeting.
- Registrants reflected a broad cross-section of the C&D industry; the number of registrants in each stakeholder category included:
 - C&D Facilities/waste facilities/waste haulers: 20
 - Recyclers: 5
 - Property owners/developers: 1
 - Construction/Demo Contractors: 6
 - Consultants/Architects/Designers: 6
 - Trade Associations: 2
 - Government Agencies: 18
 - NGOs/Academia: 3
- At the start of the meeting, there were 40 participants on the call.

CY2025 C&D Facility Annual Report Data Analysis

([2025 C&D Annual Report Summary Data](#))

Slide 5: “Massachusetts Large C&D Handling Facilities – Disposition of Materials Handled by Facility in 2025”

This chart shows the categorical breakdown of the quantities of C&D materials managed by the 28 Large C&D Handling Facilities operating across Massachusetts in CY2025.

Left side of chart: Shows the 16 C&D Handling Facilities operated as C&D processors that separate WB and recoverable materials for reuse/recycling.

- The quantities reused/recycled are shown with green bars.
- The quantities disposed are shown with red bars.

Right side of chart: 12 facilities operated as C&D transfer stations that transfer unprocessed and partially processed C&D materials to MPS-compliant facilities for further processing.

- The quantities transferred for further processing are shown with grey bars
- Two facilities switched from operating as a processor to operating as a TS in 2025: CCR and NEWD. These facilities only accept post-process C&D residuals for disposal.

Of the 1,607,305 tons Total C&D Materials generated across the State in CY2025 (e.g., mixed C&D and bulky waste), the C&D Handling Facilities exported the following quantities of materials produced:

- Recycled-Reused: 265,985 tons, Green-colored bars
- Diverted material (sent and received as separated recyclable material to another processor; e.g., ABC, wood, gypsum): 36,023 tons, Yellow-colored bars
- Transferred to MPS-compliant facility for further processing: 371,496 tons, Grey colored bars
- Landfill Dependent Use Applications (e.g., ADC, Roadbase, Shaping & Grading): 18,218 tons Brown-colored bars
- Disposed via landfill/combustion (less inbound C&D residuals): 1,028,961 tons, Red-colored bars (eliminates double counting of inbound residuals received at TSs)

Slide 6: This map shows the locations of all the large C&D Handling Facilities and a few smaller ones across the State (28 large, 6 small).

These facilities are permitted to accept mixed C&D Waste loads:

- Facilities that operate as processors must separate all waste ban materials and comply with the MPS
 - They are allowed to dispose of any post-process C&D residuals that they generated themselves, or received from another MPS-compliant facility
- Facilities that operate as transfer stations are not allowed to dispose of any unprocessed or partially processed C&D materials;
 - they must transfer any unprocessed/partially processed materials to an MPS-compliant processor for further processing; or
 - they can dispose of post-process C&D residuals received from an MPS-compliant processor

Slide 7: “C&D Industry Recycling Rate/Process Separation Rate Trend Chart”

The “Recycle Rate/Process Separation Rate Trend Chart” shows the historical C&D Industry recycle rate, and the more recent process separation rate (PSR) adopted in 2020. (Note: the PSR is very similar to the historic recycling rate calculation prior to 2016, thus the dashed line that connects them)

This chart shows that the PSR industry average increased to 21.6% in CY2025. This is a favorable improvement, and a step in the right direction.

Slide 8: “Outbound/Inbound Material Trends compared to 2030 C&D Waste Reduction Goal”

C&D waste represents approximately 20-25% of all the solid waste disposed each year by Massachusetts residents and businesses. Therefore, after carefully evaluating the composition of the C&D Waste stream material-by-material, MassDEP established an aggressive, but what we believe to be a realistic and achievable, waste reduction goal for the 2030 SWMP to reduce the amount of C&D waste disposed by 260K tons compared to the baseline year of 2018. That equates to a goal of no more than 725K tons disposed by 2030.

In 2025, the trend line for C&D waste disposed dropped to 1,029K tons, comparable to 2020 (year of the Pandemic shutdown). While we’d like to believe that this reduction reflects less C&D waste being generated due to jobsite source separation and recycling, this decrease may also reflect one of two contributing factors:

1. Economic slow-down that resulted in generating less inbound tonnage to process, or
2. Loss of C&D Waste being transferred directly to out-of-state recycling/disposal facilities

The trend line for recycled/reused materials showed a slight decrease from last year to 266K tons, which is unfavorable, but may be a reflection of the drop in inbound tonnage. The trend chart makes clear that the annual tonnage of C&D waste disposed (red-line on the chart) still needs to make significant reductions to meet our 2030 SWMP C&D waste reduction goal. That’s one of the reasons why the C&D processors across the state need to maximize their process separation rate.

Slide 9: “Estimate of Readily Recoverable Materials with Viable End-Markets”

This table addresses the question: If the statewide C&D industry were able to separate the maximum quantity of recoverable materials with viable end markets, how much could they recover?

Using the compositional analysis reported in the 2022 C&D and BW Waste Characterization study, this table extrapolates an estimate of the total quantity of recoverable materials in the C&D and BW tonnage accepted by C&D Handling Facilities in CY2025.

This table suggests that there is considerably more material available for C&D processors to recover, but they currently can only recover about 40% of what is potentially available. Given the current limits of the industry, we have concluded that relying on C&D processors alone will not achieve our SWMP goal by 2030.

But of course, one of the most effective ways to achieve the C&D SWMP goal is to reduce the amount of C&D waste being generated in the first place (which is consistent with the

waste management hierarchy). And that requires an all-of-the-above approach that starts with pre-demo/reno materials management plans, and incorporates deconstruction, salvage, and jobsite source separation.

Though jobsite source separation may not sound appealing at first to C&D handling facilities, it could benefit these facilities in a couple ways:

- Jobsite source separation could target materials that are difficult for the C&D processors to manage, e.g., gypsum wallboard, ceiling tiles, painted/treated wood.
- C&D Handling Facilities that accept job site source separated recyclable materials could also get credit toward the PSR calculation.

Slide 10: “Wood Products Trend Chart 2018-2025”

This bar graph shows the actual quantity of wood products produced annually since 2018: particle board wood chip (blue bar); biomass fuel feedstock (red bar); bulking agent (olive green bar) and total product produced (purple bar)

For comparison, the latter three years show the estimated quantity of A-wood and B-wood that potentially could have been recovered from the inbound C&D waste stream. (These quantities were estimated using the latest MassDEP waste characterization study compositional data from 2022)

- The quantity of potential A-wood is shown with green-stripe bars
- The quantity of potential B-wood (painted and treated) is shown with orange stripe bars

Comparing the total products produced to the estimated quantity of A-wood potentially available shows that the processors are only recovering about 43% of what’s available.

Slide 11 “Clean Gypsum Wallboard Recycling Trend Chart 2018-2025”

Looking at the trend chart of quantities of clean gypsum wallboard separated for recycling by C&D processors, it has steadily declined since its peak in 2021. CY2025 has declined compared to the previous year.

For comparison, the latter three years show the estimated quantity of clean gypsum wallboard (CGW) that could potentially be recovered from inbound C&D and Bulky waste streams. (Estimated using MassDEP’s most recent waste characterization study compositional data from 2022.)

This chart shows that the C&D Processors are only recovering about 10% or less of the potential recoverable CGW that could otherwise be recycled. For this reason, when MassDEP conducts facility inspections, one of the areas we focus on is facility compliance with the 2013 gypsum wallboard guidance and the site-specific WBCP (i.e., which stipulates that gypsum must be separated from tipped loads prior to any mechanical processing or transfer to another processor).

I recently attended a CDRA Gypsum Recycling Committee monthly meeting. I heard a speaker from the Solid Waste Management Division for Metro Vancouver, BC. He reported the following clean gypsum wallboard recycling numbers for 2024:

- Recycled 76,600 tons
- Disposed 4,400 tons
- 94% Recycling rate

It's interesting to note that Vancouver, BC has only half the population of the Comm. of Mass, yet Vancouver recovers 40X more by weight than Mass. The Vancouver speaker opined that Mass. has significantly underestimated the amount of clean gypsum wallboard potentially recoverable.

Given that the C&D industry has been unable to capture any appreciable amount of gypsum for recycling, I am proposing to organize a meeting between USA Gypsum and the AGCMA and other large construction firms to encourage more jobsite source separation.

Slide 12: "CY2025 C&D Materials Captured compared to Potential Recoverable"

These two graphs estimate the material capture rate for seven of the most common and most recoverable materials in C&D materials.

The capture rate is shown both in tonnage recovered compared to potential recoverable and as a percentage of potentially recoverable material.

It may come as no surprise that ABC and metal materials show high capture rates.

A-Wood, OCC (Cardboard) and Mattresses show a moderate capture rate, but have room for improvement.

And CGW and Asphalt Shingles show a low capture rate and have considerable room for growth. These are both heavy materials, so any improvement in recovery would likely result in a significant benefit to the PSR calculation.

C&D Facility MPS Compliance Status Update, Based on CY2025 Annual Reports

[\(Status of In-State Facility Compliance with C&D Minimum Performance Standard, Based on CY2025 Facility Annual Reports\)](#)

Slide 14: "MPS Compliance Status of C&D Processors"

Of the 16 large C&D handling facilities operating as processors (i.e., required to meet both MPS performance criteria), 10 were fully compliant. And 6 facilities failed to meet the 20% PSR minimum threshold.

Of the 10 facilities that were MPS compliant, one caveat to consider is that RWS-Roxbury was not fully operating its facility while rebuilding after a fire in March 2025. So the 57% PSR may not be realistic but rather an artefact of its interim operating status. RWSR only processed about 30% of the C&D materials it received, the other 70% were transferred offsite for further processing. To their credit, RWSR increased the quantities of heavy source-separated materials accepted, such as ABC, metal and gypsum. This resulted in the high PSR value achieved, but it may fall back into the mid-20% range when the facility

resumes processing all the waste it receives, and the denominator of the PSR calculation reflects that larger quantity of materials processed.

Slide 15: “MPS Compliance Status of C&D Transfer Stations”

For a C&D handling facility operating as a transfer station to be MPS compliant, it must transfer all unprocessed or partially processed C&D materials to an MPS-compliant processor for further processing after first separating clean gypsum wallboard (CGW) and zero-tolerance (ZT) waste ban items

Of the 12 C&D Handling Facilities operating as transfer stations, 7 met the MPS requirements.

5 facilities did not meet the MPS requirements because they did not report separating any CGW.

Out-of-State C&D Facility Conformance to MassDEP MPS requirements, Based on CY2025 Annual Reports

[\(Status of Out-of-State Facility Conformance to C&D Minimum Performance Standard, Based on CY2025 Facility Annual Reports\)](#)

Slide 17: “Conformance to MassDEP MPS requirements as a C&D Processor”

Of the 6 Out-of-State C&D processors that routinely receive unprocessed and partially processed C&D materials from in-state C&D handling facilities, 3 met the 20% PSR minimum threshold, 3 did not.

Compliance & Enforcement Approach

Slide 18: For facilities that fail to demonstrate full compliance with the MPS, MassDEP will investigate further and may take enforcement action.

- MassDEP will follow the progressive discipline model from Notices-of-Noncompliance (NONs) to High-Level-Enforcement (HLE) to encourage improvement.

In 2025, MassDEP executed one HLE Administrative Consent Order with Penalty (ACOP); MassDEP increased compliance inspections for site specific permit requirements; and in order to better track compliance with the PSR incremental increases

- 17 large permitted C&D processors started submitting quarterly MPS progress reports
- 1 processor continues to submit monthly MPS progress reports

Slide 19: “Incremental Increases in PSR Minimum Threshold (announced in July 2024)”

The next incremental increase in the Process Separation Rate (PSR) Minimum Threshold goes into effect on 1/01/2027, just 7 months from now.

Starting then, all C&D processors will need to meet a 23% PSR Minimum Threshold.

If operating a C&D handling facility as a processor, now is the time to make necessary operational improvements to meet the new PSR minimum threshold.

As we just saw in a previous slide, except for RWSR, which may not be a realistic value for the reasons we discussed, none of the 16 in-state C&D processors had yet achieved this level of operational effectiveness in 2025.

Discussion

Slide 20: “Discussion”

During the call, there was a fair amount of parallel discussion in the Chat. Here are some of the highlights that showed up in the Chat log:

- There was a lively exchange of information between construction firm sustainability managers about using split dumpsters as a tool to assist with jobsite source separation. While no one on the call had any actual experience using such containers on their projects, there were references to successful outcomes reported from the Pacific Northwest. There were also reports of logistical challenges that could increase tipping times.
- In response to a question about whether MassDEP had ever taken an enforcement action against a person for violating the clean gypsum wallboard waste ban, MassDEP referred to the list of waste ban enforcement actions that appears on the MassDEP webpage at the following link: [MassDEP waste ban enforcements](#).
- In response to a question about the availability of recycling markets for asphalt shingles, MassDEP referred to the two existing outlets: Patriot Environmental in Raynham and Rooftop Recycling in Boxboro. To find ways to increase demand for this product, MassDEP expressed an interest to reach out to other state agencies such as DCR, DCAMM, etc. to explore potential uses for recycled asphalt shingles in properties maintained and operated by the State.
- Concerning out-of-state processors that failed to conform to the MassDEP MPS requirements based on their self-reported CY2025 annual report data; a person asked how much time they will have to demonstrate that they are back in conformance? MassDEP responded that regional solid waste management staff will investigate the in-state facilities that are using the non-conforming out-of-state facilities to evaluate if the condition persists, and if so, work with the affected in-state facilities to agree on actions and timelines to ensure MPS compliance.
- A municipal official from the Town of Bourne, which manages a solid waste landfill and a large C&D transfer station, took the opportunity to remind everyone of the threat posed by lithium ion battery fires at solid waste facilities. He raised attention to [House Bill 968](#) “An Act Establishing a Lithium Ion Battery Stewardship Program” that is under review by the legislature, and which is supported by the Mass Fire

Chiefs Association. He encouraged everyone in this industry to support passage of this bill.

- But considering the difficulty passing stand-alone bills, the Bourne municipal official also mentioned the [Environmental Bond Bill](#) (AKA Ready Act) that is due to be amended. If the Ready Act can be amended to include the stand-alone bill for a lithium ion battery stewardship program, it may have a better chance of passing.

Point of Contact

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END of Meeting Notes.