

SWAC C&D Subcommittee Meeting
MassDEP – Bureau of Air & Waste
May 20, 2021; 10:00 AM to 11:40 AM

Meeting Notes:

Recorded by: MassDEP and Recycling Works staff, edited by Mike Elliott (MassDEP)

NOTE: Copies of the meeting notes and presentation slides are available on the MassDEP C&D Subcommittee webpage. The MassDEP C&D Subcommittee webpage can be found at the following link: <http://www.mass.gov/eea/agencies/massdep/news/advisory-committees/cd-subcommittee.html>. Comments can be submitted via email to Mike Elliott at michael.elliott@mass.gov.

Agenda

- Welcome/Safety/Introductions
- C&D Minimum Performance Standard Update
- Modified Process Separation Rate (PSR) Calculation
- Clarification of Specific Issues
- Next Steps
- Announcements/Updates

Welcome/Safety/Introductions

MassDEP welcomed participants to the webinar.

- Participants on webinar: 45 (as recorded on webinar attendee report).
- Participants reflected a cross-section of stakeholders representing: C&D Processors and Transfer Stations; Recycling Processors; Recycling/Re-use End-Markets; Construction Management Firms; Waste Haulers; Trade Association Representatives; Attorneys and Consultants; and State/Local Officials.
- MassDEP also provided the link to COVID-19 information specific to the Solid Waste industry (<https://www.mass.gov/lists/massdep-solid-waste-policies-guidance-fact-sheets# covid-19>).

C&D Minimum Performance Standard Update

MassDEP provided an update of the C&D Minimum Performance Standard (MPS) Implementation Plan:

- The MassDEP C&D MPS can be summarized by the following statement: **ENSURE THAT EVERY TON OF C&D DEBRIS IS PROCESSED AT AN MPS-COMPLIANT FACILITY**. This fundamental tenet is at the core of all subsequent decisions and actions.
- The C&D MPS establishes two measurable performance criteria:
 1. Achieve a 15% Process Separation Rate (PSR) minimum threshold
 2. Demonstrate that all banned materials are separated to the greatest extent possible
- MassDEP emphasized that the 15% PSR is a **MINIMUM THRESHOLD**, not a target end-point. If a facility can safely separate more than 15%, then that is what is expected – separate all waste ban materials to the greatest extent possible. Just reaching a 15% PSR does not guarantee that a facility is in compliance with the Waste Ban reg requirements or its site-specific Waste Ban Compliance Plan. The PSR minimum threshold may be increased over time to encourage continual operational improvement across the entire industry.

- The 2nd criterion effectively reinforces what is already required in the facility specific waste ban compliance plans. A C&D facility must be able to demonstrate that it is separating all four C&D waste ban materials (ABC, metal, wood and clean gypsum wallboard) and any other waste ban materials that come with a mixed waste load (for example, cardboard, tires, CRTs, and we can add mattresses to the list in the not-too-distant future.). This criterion ensures that a facility is not simply separating one or two materials to meet the PSR minimum threshold, but it is separating all waste ban materials to the greatest extent possible.
- if a facility fails to meet either MPS performance criteria, it cannot dispose or arrange disposal of any remaining unprocessed or partially processed C&D waste materials. Rather, it must transfer any such materials to a an MPS-compliant facility.
- For a facility that does not meet the MPS, there are essentially three options for continued operation:
 1. It can make the necessary investment in equipment, procedures and staff to Improve operational performance and meet the MPS;
 2. It can transfer any unprocessed or partially processed C&D materials to an MPS-compliant facility for further processing; or
 3. It can accept C&D Residuals from MPS-compliant facilities for disposal
- Any one of these three pathways to compliance, or a combination of them, is acceptable to MassDEP.
- MassDEP reviewed the implementation plan schedule through CY2021. MassDEP has completed the preliminary analysis of the CY2020 C&D Facility annual report data. MassDEP will issue Preliminary MPS Status letters to each facility before the end of May (now projected to be issued in early June).
- For more information on the MassDEP C&D MPS and Waste Ban Regs more generally, please refer to the following links on the MassDEP webpage:
 - MPS Statement (Feb 2020): <https://www.mass.gov/doc/minimum-performance-standard-for-construction-demolition-handling-facilities/download>
 - MPS FAQs (May 2020): <https://www.mass.gov/doc/frequently-asked-questions-faq-minimum-performance-standard-for-cd-handling-facilities/download>
 - C&D Materials Waste Ban FAQs (Jun 2020): <https://www.mass.gov/doc/frequently-asked-questions-construction-demolition-materials-waste-ban/download>
 - Overarching MassDEP Waste Ban Regulation: <https://www.mass.gov/guides/masdep-waste-disposal-bans>
- Using the CY2020 C&D annual report operational data, MassDEP assembled a table summarizing the number of facilities that comply with each of the MPS performance criteria.
 - Of the 18 C&D Processors:
 - 7 were fully MPS compliant, in other words, they met both MPS performance criteria
 - 2 met only criterion #1 (15% PSR minimum threshold);
 - 2 met only criterion #2 (separated all 4 C&D WB materials); 1 of these 2 facilities expects to be MPS compliant by year-end, and the other is making plans to be compliant.
 - 7 failed to meet either criterion; 1 recently installed a new process line and expects to be MPS compliant.

- Obviously, MassDEP is concerned about the number of MPS non-compliant facilities, and we must work with them to raise the bar and get all of them meeting the MPS.
- Of the 13 Large C&D TSs:
 - 1 met both MPS performance criteria
 - 3 met criterion #1 (15% PSR min. threshold);
 - 2 met criterion #2 (separated all 4 C&D WB materials)
 - 7 failed to meet either criterion
- Already at this early stage of the MPS program implementation, we are seeing favorable improvements at a number of facilities. Here are a few examples...
 - Western Recycling (120 OBRRC) installed a new processing line and commenced operation on 2/01/2021. It fully expects to achieve MPS compliance.
 - Two other facilities have stated their intent to install processing lines to achieve MPS compliance: NEWD and UMM-Leominster
 - In 2019, Raynham Regional Waste Processing installed a wood separation line to increase the recovery of A-wood that meets the spec for recycling and biomass fuel.
 - Two TSs in the Western region, Casella Holyoke and Lenox Valley WTF, have improved their process separation rate, and are separating all four C&D WB Materials.
 - ReSource Waste Services of Roxbury (formerly ReEnergy) secured permission from the City of Boston to increase their hours of operation. This has allowed them to process more material over two shifts and improve their process separation rate.
 - And in Brockton, Champion City Recovery has installed dedicated containers to separate more WB materials including metal, clean gypsum wallboard, mattresses and tires.
 - These are all positive signs of improvement. Some have opined that we haven't seen this much activity and investment in the industry since the C&D waste bans were first introduced in 2006.
 - Since the meeting, MassDEP has heard from Trojan Recycling in Brockton with plans to install a new processing line that they expect will allow them to achieve MPS compliance.

Modified PSR Calculation

- MassDEP showed a slide with the formula for the PSR calculation as originally proposed in October-2019 and later memorialized in the MPS Guidance document (February-2020).
 - The most significant feature of this formula is that it compares the quantity of material separated to the total inbound material accepted.
 - This represents a big change from the Recycling Rate formula, that had traditionally been used in the past, in that the recycling rate compares the quantity of separated materials to only one of the inbound material waste streams – mixed C&D waste.
 - From MassDEP's perspective, the process separation rate is a better indicator of overall operational performance.
- The next slide showed the formula for the Modified PSR calculation.
 - The modified formula provides credit for C&D materials transferred to MPS-compliant facilities, but that don't qualify as "Diverted Materials".

- Any unprocessed or partially processed material transferred to an MPS-compliant facility for further processing is deducted from the tonnage of Total Inbound Materials Accepted in the denominator.
- From an accounting perspective, this makes sense since the actual processing of the transferred tonnage is happening at the final MPS-compliant receiving facility, not at the intermediate facility that transferred it.
- This is meant to serve as yet another incentive to direct as much C&D material as possible to the high-performing, well-equipped MPS-compliant facilities.
- MassDEP recognizes that CY2020 was a very challenging year for the solid waste industry, so in an effort to address the impact of the COVID-19 pandemic on C&D Handling Facility Operations in CY2020, MassDEP evaluated the PSR for each facility in two ways:
 1. Calculated the PSR based on the full year 2020 data as reported; and
 2. Calculated the PSR for the full year less tonnages during the most severely impacted months of the pandemic, i.e. April, May and June of 2020.
- MassDEP then assigned whichever PSR calculation was the most favorable for the facility in determining CY2020 MPS status
- The final slide of this section showed two graphs of the PSR distribution based on the preliminary CY2020 C&D Facility annual report data for 18 C&D Processors and 13 Large C&D Transfer Stations.

Clarification of Specific Issues

Separated C&D Wood as “Diverted Material”

- "Diverted Material" means the material is sent and received as a separated material
 - it requires no further processing to remove potential contaminants; does not get run through the processing line;
 - it meets the recycling spec ‘as is’; and,
 - gets placed in the finished wood pile for, at most, grinding to an acceptable size as a finished product.

Management of “Bulky Waste”

- These two slides clarify how MassDEP expect facilities to distinguish between MSW and C&D loads.
- Regardless of how a waste load is classified - MSW, C&D or Bulky - Waste Ban materials must be addressed in compliance with the facility specific WBCP.
- If the Bulky Waste shows up in an MSW load and contains any WB materials in excess of the Action Levels, it must be managed as a failed load, or the WB materials must be separated in compliance with the WBCP.
- If the Bulky Waste shows up in a C&D load and contains any WB materials, all WB materials must be separated to the greatest extent possible in compliance with the WBCP.
- C&D/Bulky Waste must also be reported on the C&D Facility Annual Report Form.

Stockpiling of “ABC”

- This issue has arisen at a few C&D facilities that stockpile uncoated ABC onsite for a certain period of time until a sufficient quantity is accumulated to warrant renting a crusher to process the stockpiled material for reuse as aggregate.

SWAC C&D Subcommittee Meeting
MassDEP – Bureau of Air & Waste
May 20, 2021; 10:00 AM to 11:40 AM

- MassDEP cautions against stockpiling of any material for extended periods of time to avoid the "speculative accumulation" prohibition
- A facility can take no credit for stockpiled ABC until it is crushed and put to some type of legitimate reuse as aggregate, for example:
 - moved onsite to an area for retail sale, or
 - moved offsite for reuse in construction

Clean Gypsum Wallboard

- This is meant to serve as a reminder of the May 2013 Clean Gypsum Wallboard guidance that every facility permitted to accept C&D materials must have a program in place to separate clean gypsum wallboard as soon as it shows up on the tip floor (<https://www.mass.gov/doc/gypsum-wallboard-waste-ban-guidance-cd-handling-facilities/download>).
- Clean gypsum wallboard must be separated prior to any mechanical processing or transfer.
- It cannot be transferred in a mixed C&D waste load for further processing. It can only be transferred as a separated material in a dedicated container for aggregation or recycling.
- Therefore every C&D Handling Facility annual report should demonstrate generation of some quantity of clean gypsum wallboard proportional to the amount of mixed C&D waste that it receives.

Next Steps

MassDEP requested voluntary submission of MPS Compliance Plans by June (now extended to early July).

- Early June-2021 (revised from May-2021 as stated in 5/20 meeting): MassDEP issues Preliminary CY2020 MPS Status Letters
- Early July-2021 (revised from June-2021 as stated in 5/20 meeting): C&D Facilities respond to Preliminary CY2020 MPS Status Letters
 - If MPS non-compliant, submit plan and request approval from regional SWM Section Chief to achieve and demonstrate compliance by year-end (or within a reasonable period of time)
- Late July-2021: MassDEP will issue Final CY2020 MPS Status Letters

Compliance & Enforcement Starting in Aug-2021 (revised from Jul-2021 as stated in 5/20 meeting)...

- For MPS non-compliant facilities with no approved plan to achieve and/or demonstrate compliance by year-end
 - MassDEP may conduct compliance inspections
 - Based on findings, MassDEP may exercise progressive enforcement under Waste Ban Regulations and facility-specific WBCPs
 - Return-to-Compliance conditions will address all deficiencies including MPS compliance

Announcements/Updates

CDRA Update

- Bill Turley, Executive Director of CDRA, provided some updates on the national scene
 - Environmental Justice, ESG, Climate Change are the focus of current administration.
 - End Markets under development
 - Mycocycle
 - Fines processing
 - Fines/Biochar

- Concrete recycling paper
 - WasteExpo/ other meetings
- Bill can be reached at turley@cdrecycling.org for more information.

NWRA Update

- Steve Changaris, VP of the NWRA Northeast Chapter, provided some updates on the regional trends.
 - NWRA and NERC are partnering to provide guidance on Diversity, Equity and Inclusion programs.
 - Steve concurred that EJ is of high importance to the current Administration and that the Northeast (MA, NJ and NY) is leading the way in EJ initiatives.
 - Steve can be reached at schangaris@wasterecycling.org for more information.

Discussion

Public stakeholders brought up the following subjects for discussion:

Q. A construction management firm representative asked: How do out of state facilities factor into MPS?

A. As stated in MPS guidance: “If transferring material out-of-state, the C&D Handling Facility must provide documentation that the out-of-state processor conforms to the MassDEP MPS performance criteria.” MassDEP has done its own research of C&D Processors in surrounding States. After reviewing the most recent annual report data for these facilities, MassDEP found that all but one conforms to the MassDEP MPS performance criteria. The one that doesn’t yet conform submitted a plan to MassDEP to make improvements by the end of year that will meet or exceed MPS compliance.

Q. The NEWMOA representative, Jennifer Griffith, suggested some construction companies might not know about the requirements and might send directly for disposal? How are we to make sure they send to a compliant facility? Is anyone doing outreach to the construction industry?

A. In-state, the solid waste landfills and transfer stations are responsible for complying with the Waste Ban regulations (310 CMR 19.017). So in-state, at least, all mixed C&D waste loads will be directed to an MPS-compliant processing facility either directly or by way of a C&D transfer station. MassDEP does not control direct shipments from the jobsite to out-of-state landfills. However, we believe that most C&D materials generated in Massachusetts pass through an in-state facility. In addition, most of the large construction firms have mature environmental management and sustainability programs that encourage recycling. Some of these firms also participate on this subcommittee and have taken an active role working with C&D processors to develop specifications to enhance recyclability of the loads they generate (e.g. separate gypsum wallboard from mixed loads). That said, there is always room for improvement, and we should explore how to more fully engage the construction community.

Q. A large C&D TS representative inquired if shingles are treated in a similar manner as C&D Wood with respect to “Diverted Material”?

A Yes, generally asphalt shingles transferred to a processor for recycling count as a recycled material and will be credited toward the facility’s process separation rate.

Q. A large C&D TS representative asked about residuals generated by a facility that is operating below the 15% MPS but is working (with DEP) to meet the standard; how should the facility who receives those residuals, account for those tons toward the MPS calculation? The facility receiving those non-MPS compliant residuals should not be handicapped for trying to facilitate disposal.

A. If a facility is not meeting the MPS, then the most it is generating would be classified as partially processed C&D waste, not C&D residuals. The receiving facility must treat the partially processed C&D waste in accordance with its Waste Ban Compliance Plan as mixed C&D waste and separate all waste ban materials to the greatest extent possible. For a specific situation, it is best to run it past the regional solid waste section chief who can evaluate all mitigating circumstances. MassDEP Division Director, Greg Cooper, emphasized that the Solid Waste Regional Section Chiefs are willing to work with any facility that comes to MassDEP voluntarily with a viable plan to achieve MPS compliance in a reasonable period of time. These discussions should happen as soon as possible. Facilities that have reached agreement on a compliance plan with MassDEP will be considered to be compliant as long as they meet all applicable compliance dates in that plan.

Q. A large C&D TS representative asked what are the Department's plans for communicating which facilities are in compliance with the MPS? This would be facilities accepting C&D for recycling and facilities generating residuals and fines. Or is the expectation that we will police our own customers?

A. MassDEP intends to issue final MPS status report letters to all Large C&D Handling Facilities by the end of July 2021. About the same time, MassDEP will publish a summary table of the MPS status of each facility that will be made available to the public on the MassDEP website. The summary table will only show a binary status of compliance for each of the MPS criteria and overall MPS compliance. It will not divulge actual performance data. The summary table will also report if a C&D facility has an approved plan to achieve MPS compliance. Until then, a C&D Transfer Station can inquire with MassDEP for the status of any other C&D facility. That will allow C&D Facilities to know whether they can accept transferred C&D waste loads as Cat-1 mixed C&D waste or Cat-2 C&D residuals.

Q. A C&D Processing Facility representative asked: Has there been an update regarding grinding wood on non site assigned property?

A: This is a site-specific question which cannot be answered in this setting. This needs to be addressed with the regional solid waste section chief, which in this case is Mark Dakers in SERO. Broadly speaking, wood separated from mixed C&D wood waste is classified as a regulated solid waste, thus it would normally need to be managed on a site assigned property.

Q. Regarding gypsum separation, a C&D facility representative asked for clarification on what is acceptable between coloring, coated with fiber? He stated that the majority of what they see is colored.

A. MassDEP reached out to Terry Weaver, president of USA Gypsum, to verify what colors of clean gypsum wallboard are accepted by USA Gypsum. Terry reported that specialty boards (e.g. biocide added to prevent mold, or fiberglass facing for exterior use, or polymer layer to improve soundproofing, etc.) are prohibited from recycling at the USA Gypsum facility. The biocides and special facings/fillings added to specialty boards render the processed material unsuitable for the end recycling markets, agricultural soil amendments, and animal bedding, respectively. Consequently, USA Gypsum can only accept plain wallboard with paper facing/backing. The plain wallboard is always white or grey. The specialty boards can be easily identified by their bright colors, e.g. green, yellow and purple. The good news is that according to data published by the USGS, only about 14% of new board shipped is one of

SWAC C&D Subcommittee Meeting
MassDEP – Bureau of Air & Waste
May 20, 2021; 10:00 AM to 11:40 AM

the specialty board products. (Note: Terry provided a product newsletter and an informational presentation on the subject, so contact Mike Elliott at MassDEP if you would like copies of the documents.)