

Overview of C&D Action Plan Development as part of 2020-2030 Solid Waste Master Plan

Excerpt from June 2017 C&D Subcommittee Meeting

**2010 - 2020 Solid Waste Master Plan – review proposed
C&D objectives and actions**

2010 - 2020 Solid Waste Master Plan:

C&D Materials Diversion and Market Development

- **Objective**
 - Increase recycling rate for C&D materials excluding ABC to 50% by 2020
 - Reduce C&D disposal and landfill dependent uses by 400,000 tpy by 2020
- **Current status**
 - As of CY2015
 - The C&D recycling rate was calculated at approximately 27% (DSM study)
 - The amount of C&D disposed had dropped by 270,000 tpy, from 670,000 tons in 2007 to 400,000 tons in 2015 (annual solid waste data).

2010 - 2020 Solid Waste Master Plan:

C&D Materials Diversion and Market Development

Action Item	Discussion
<ul style="list-style-type: none">• Increase C&D Recycling at C&D Processors<ul style="list-style-type: none">○ Develop consistent recycling requirements and incorporate them into C&D recycling facility permits	<ul style="list-style-type: none">• Do we develop performance standards for C&D Processors and Large C&D Transfer Stations?
<ul style="list-style-type: none">• Recycling Loan Fund<ul style="list-style-type: none">○ Make C&D materials a priority category for RLF projects○ Pursue opportunities to apply other state economic development assistance programs to support growth in C&D recycling	<ul style="list-style-type: none">• RLF priority categories amended to include C&D• 2017 RBDG grant application included 2 materials highlighted in DSM C&D Market Study<ul style="list-style-type: none">○ C&D Wood○ Post-consumer bulky rigid plastic
<ul style="list-style-type: none">• C&D Material Specifications<ul style="list-style-type: none">○ Work with C&D industry to develop common specs for different categories of materials to facilitate consistent material streams for end markets	<ul style="list-style-type: none">• Do we develop specifications for common products and by-products generated by C&D processors (e.g. A-wood, B-wood, fines, residuals, ADC, landfill roadbase, animal bedding, WWTP sludge additive, etc.)?

For complete list of proposed C&D actions, see Section 3.5 of 2010-2020 SWMP:

<http://www.mass.gov/eea/agencies/massdep/recycle/reports/solid-waste-master-plan.html#1>

2010 - 2020 Solid Waste Master Plan:

C&D Materials Diversion and Market Development

Action Item	Discussion
<ul style="list-style-type: none">• Targeted Waste Bans<ul style="list-style-type: none">○ Concurrent with market development, develop waste bans for:<ul style="list-style-type: none">■ Gypsum wallboard■ Asphalt shingles■ Carpet■ Ceiling tiles	<ul style="list-style-type: none">• New gypsum wallboard waste ban added 2011<ul style="list-style-type: none">○ Original market in Massachusetts failed (Gypsum Recycling of America)○ Existing market operates reliably in PA (USA Gypsum)○ New market just opened in Massachusetts (Mass Gypsum Recycling)• Add other material waste bans?
<ul style="list-style-type: none">• C&D Source Separation<ul style="list-style-type: none">○ Maximize the amount and value of materials recovery from C&D sites, including:<ul style="list-style-type: none">■ Source separation■ Deconstruction■ Materials reuse○ Take into consideration project scale and cost	<ul style="list-style-type: none">• RecyclingWorks in Massachusetts BMP Guide for generators of C&D materials (https://recyclingworksma.com/construction-demolition-materials-guidance/) posted April 2017

For complete list of proposed C&D actions, see Section 3.5 of 2010-2020 SWMP:
<http://www.mass.gov/eea/agencies/massdep/recycle/reports/solid-waste-master-plan.html#1>

Excerpt from March 2018 C&D Subcommittee Meeting

**2020-2030 Solid Waste Master Plan – Themes, Ideas and
Suggestions for C&D action plan**

Development of C&D Action Plan

CY2016-2017 Input: consultant studies, data collection and stakeholder input

- Following extensive stakeholder process, RecyclingWorks published:
 - C&D Best Management Practices (<https://recyclingworksma.com/construction-demolition-materials-guidance/>), and
 - Case Studies (<https://recyclingworksma.com/how-to/materials-guidance/construction-materials/>)
- NERC/DSM 2016 C&D Debris Market Study (<https://www.mass.gov/files/documents/2017/05/zp/2016study.pdf>)
- August 2017 Survey Monkey Questionnaire (MassDEP-BAW)
- October 2017 C&D Subcommittee Meeting (<https://www.mass.gov/lists/cd-subcommittee-meeting-archive>)

Development of C&D Action Plan

- Themes emerging from CY2016-2017 input
 1. Jobsite Waste Management
 - Promote waste re-use, reduction and separation at the job site
 2. Enhance C&D Facility Performance
 - Improve performance of existing C&D waste bans
 - Improve recovery rates at C&D Handling facilities
 3. Develop End Markets
 - Expand existing/new wood markets
 - Identify outlets for C&D Fines
 - Promote interagency cooperation with MassDOT, DCAM, etc.

Development of C&D Action Plan

Theme: Promote waste re-use, reduction and separation at the job site

- Feedback/Ideas?
- Source Separation Pilot Project Initiative
 - Increase recovery of:
 - Clean Wood
 - OCC
 - Plastic
 - Better recovery of fragile materials
 - Gypsum wallboard
 - Ceiling tiles

Development of C&D Action Plan

Theme: Improve performance of C&D waste bans

- Feedback/Ideas?
- Propose minimum performance standards at all C&D Handling Facilities
 - Incorporated into ATO renewals at 3 facilities in SERO
- Require removal of banned items from both Bulky/DTM and mixed C&D waste (to the greatest extent possible)
 - No distinction
- Clarify definition of “Residuals”
 - Only comes from C&D processor with mechanical sorting and picking line
 - Kick-sort facilities (e.g. transfer stations) do not generate “Residuals”

Development of C&D Action Plan

Theme: Improve recovery rates at C&D Handling facilities

- Feedback/Ideas?
- CY2018 RBDG program target materials will include “Clean Wood”
 - Install innovative sorting technologies to increase recovery of Clean Wood

Development of C&D Action Plan

Theme: Expand existing/new wood markets

- Feedback/Ideas?
- Tafisa has capacity to accept more C&D A-Wood that meets specification
- Explore existing markets for reuse, recycling or energy recovery of clean wood

Development of C&D Action Plan

Theme: Identify outlets for C&D Fines

- Feedback/ideas?
- As landfills reach end-of-life and acceptance specs are tightened, BUD material uses will continue to diminish
- Identify other BUD material uses
 - Remove sulfates and heavy metals to improve value

Development of C&D Action Plan

Theme: Promote interagency cooperation with MassDOT, DCAM, etc.

- Feedback/ideas?
- MassDEP is engaged in dialogue with both agencies
 - MassDOT: explore HMA spec expansion to allow use of processed, post-consumer, tear-off RAS
 - DCAM: partner on C&D management plan for surplus site projects
- Reach out to Municipal DPWs statewide

Development of C&D Action Plan

- 2018 C&D Subcommittee Meetings – continue refining themes under consideration
 - June 14, 2018
 - October 18, 2018
- Draft plan in 2019
 - Translate themes into draft targets and objectives
 - Incorporate C&D Action Plan into draft SWMP for public review and comment
- Final plan in 2020