

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