C&D annual report form suggestions for improvement

Work Shop at MassDEP Boston Office 100 Cambridge Street, Boston, MA 02114 October 21, 2024 10:00 AM – 12:00 PM

Conduct workshop to improve C&D facility annual report form submittals

- Suggested improvements based on input from:
 - MassDEP observations/experience
 - Best practices in surrounding states
 - Construction managers observations/experience
- Conduct a workshop with stakeholders
 - Draft 1st set of revisions during a workshop in October
 - Obtain internal management approval in November/December
 - Revise annual report forms/instructions by year end 2024
- Strive for continuous improvement
 - Evaluate effectiveness of revisions (mid-year 2025)
 - Draft further refinements

Suggested Improvements:

- Existing 5-page instructions document contains three sections:
 - 1. Obtaining Forms
 - 2. Reporting Process
 - 3. Conversion Factors and Material Types
- Develop more detailed guidance in "Reporting Process" Part 2
 - Ensure greater consistency and precision
- Add more material types to Part 3



Excerpt of Existing instructions "Reporting Process" pg. 2 of 5

Suggested Improvements:

- C&D materials accepted (Table C.1)
 - Require detailed break-out of accepted materials
 - Use "Materials Types" listed in Part 3 of Instructions
 - Specify "Other "materials
 - Require break-out of inbound Category-2 Residuals showing quantities and facilities of origin
 - Supplemental worksheet attachment

Massachusetts Department of Environmental Protection Bureau of Waste Prevention Solid Waste Facility Report - Construction & Demolition Processor or Transfer Station

C. C&D Operation

1. C&D Materials Accepted

Please record the tons of Materials Accepted by each Material Type for each State of Origin. Next, sum each Material Type into the TOTALS column, then sum that column into the Total Accepted box. For Material Type definitions refer to the Material/Waste Type Table on pages 3 - 5 in the accompanying "Instructions for Annual Solid Waste Facility Report - Construction and Demolition Processors and Transfer Stations".

- . Round all amounts to the nearest ton. If any material type is less than 0.5 tons, do not include that material
- No NOT include Municipal Solid Waste accepted in this table.
- Do NOT include any waste oil or household hazardous waste/products
- . If the state of origin is not listed or an additional state is needed, fill in the blank column or cross out a state in an unused column and fill in the other state
- If the material type is not listed, use one of the "Other" lines and fill in the name of the material. If more "Other" lines are needed, cross out an unused material type and fill in the other material name.

				State of Or	igin			
Material Type	MA	CT	ME	NH	NY	RI	VT	TOTALS
Asphalt/Brick/Concrete								
C & D WASTE								
C & D Wood							3-9	
C & D RESIDUALS								
CRTs/lectronics/Computers						3		
CLEAN GYPSUM WALLBOARD								
METALS								
Tires								
CLEAN WOOD						3		
BULKY WASTE								
OTHER:								
OTHER:								
OTHER:							8.3	
OTHER:								

Existing Table C.1.

Suggested Improvements

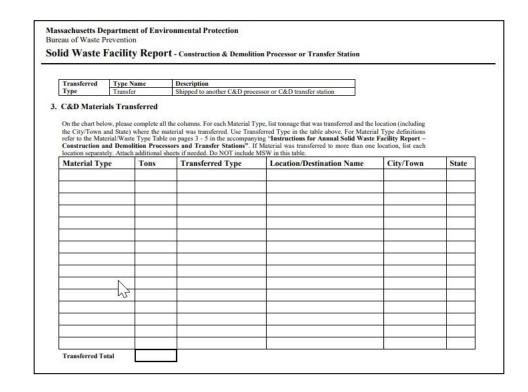
- For C&D Materials Recycled or Used (Table C.2.)
 - Only report materials sent to a recycling, end-market, reuse outlet
 - "Diverted material" NOT reported on this table
 - "Material Type" column should match material types in Part 3 of Instructions
 - Same material sent to different destinations should be reported on separate lines
 - "Recycled/Used Type" column should match categories at top of sheet

Material	Type Name	Type Name	Recycled or	Type Name	Description	dn	
Types (1st column	Asphalt/Brick/Concret		Used Types (3 rd column	Fuel	Used as a	fuel in a facility that waste combustor	at is <u>not</u> a
from left	Gypsum	C&D Wood	from left	Feedstock		feedstock in a recyc	eling process
margin)	Metal	Clean Wood	margin)	Cover Material	Used as A	Iternative Daily Co	over at a land
7.00	Asphalt Shingles	C&D Fines		Grading & Shaping Material	Used as G	irading & Shaping r	
	Glass	C&D Residuals		Roadbase Material	Used in co	onstruction of roady	ways at a land
	Cardboard	CRTs/Electronics/Compu	uters	Other:	Describe:		
	Plastic	Other:		Other:	Describe:		
City/Town an definitions ref Construction	d State) where the material fer to the Material/Waste Ty and Demolition Processor each combination of Materi	the columns. For each Material Type, was recycled or used. Use applicable pe Table on pages 3 - 5 in the accon is and Transfer Stations". If more all and Use Type. Attach additional Recycled or Used Type	e Recycled or Used Ty npanying "Instruction than one Material Typ	pes listed in the table is for Annual Solid W e applies to a single lo NOT include MSW in	above. For N aste Facility cation, list th	Material Type y Report – he location	
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Existing Table C.2.

Suggested Improvements:

- For C&D Materials Transferred (Table C.3.)
 - Report separate "Transfer Types":
 - Diverted C&D recyclable materials; sent and received as separated recyclable material
 - C&D waste transferred to an MPScompliant C&D processor for further processing
 - Diverted material definition
 - Separation of specific type of recyclable C&D material
 - Not comingled
 - Deminmis levels of contamination (<5% by volume)
 - Do NOT include C&D Residuals transferred for DISPOSAL via Rail



Existing Table C.3

Suggested Improvements

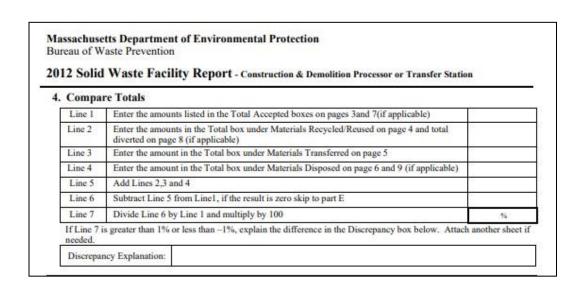
- For C&D Materials Disposed (Table C.4.)
 - Add category for "Disposed via Rail"
 - "Material Type" column should match material types in Part 3 of Instructions
 - Same material sent to different destinations should be reported on separate lines
 - Unprocessed or partially processed C&D Waste cannot be sent for disposal (see MPS policy)

Massachusetts Department of Environmental Protection Solid Waste Facility Report - Construction & Demolition Processor or Transfer Station Type Name Disposed at a solid waste combustion facility (do not include material used as 4. C&D Materials Disposed On the chart below, please complete all the columns. For each Material Type, list tonnage that was disposed and the location (including the City/Town and State) where the material was disposed. Use applicable disposal types listed in the table above. For Material Type definitions refer to the Material Waste Type Table on pages 3 - 5 in the accompanying "Instructions for Annual Solid Waste Facility Report - Construction and Demolition Processors and Transfer Stations". If Material was disposed at more than one location, list each location separately. Attach additional sheets if needed. Do NOT include Material Type Location/Destination Name Disposal Type Disposed Total Annual Report Form Page 6 of 10

Existing Table C.4.

Suggested Improvements for Compare Totals Table D.4.:

- Report mass balance summaries for C&D and MSW separately
 - Add separate tables at the end of the C&D and MSW sections
- Report beginning/ending inventories
- Report estimated tonnage of "crossover materals"
 - Mixed loads containing different waste types (e.g., MSW vs. C&D), separated on tip floor, and moved over to other waste stream
- Report volume/weight of water used for misting/dust control when a major source of mass balance discrepancy



Existing combined mass balance work sheet

Construction Managers Observations/Experience

- A number of construction managers from large construction firms have raised concerns about C&D Annual Report Form
 - Need for greater accuracy and precision
- These firms are customers of the C&D processing facilities

Construction Managers Observations/Experience

- Continuity between...
 - MassDEP SWCDFAR form
 - Signed letters for C&D-processing facilities' annual diversion rates
 - 3rd-party verification (RCI)
- What is the intent behind transfers?
 - Recycled?
 - Further Processing?
- Overutilization of "C&D Waste" line item
- Ultimately, better data management leads to...
 - Better understanding of waste generated in demolition/construction
 - Improved waste diversion within the industry