



Overview of Construction and Demolition Debris Regulation (CDD) in Maine

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and Natural Resources

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MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

Overview

- **Important Definitions**
- **Solid Waste Processing Facility Requirements & Calculations**
- **CDD Disposal in ME**
- **CDD Recycling in ME**



Important Definitions

- **Construction and Demolition Debris - 38 MRS 1303-C(9):** Debris resulting from construction, remodeling, repair, and demolition of structures excluding asbestos and other special wastes.
- **Residue - 38 MRS 1303-C(25):** Waste remaining after the handling, processing, incineration, or recycling of solid waste including, without limitation, front end waste and ash from incineration facilities.



Important Definitions

- **Recycling - 38 MRS 1303-C(22):** Collection, separation, recovery and sale or reuse of materials that would otherwise be disposed of or processed as waste or the mechanized separation and treatment of waste, other than through combustion, and the creation and recovery of reusable materials other than as a fuel for the generation of electricity.
- Recycling for “solid waste processing facilities” is slightly different and will be covered in an upcoming slide
- For now note differences in use of materials for generating energy



Important Definitions

- **Waste Generated within the State - 38 MRS 1303-C (40-A) (C):** Residue generated by a solid waste processing facility that is located within the State, regardless of whether the waste processed by that facility was initially generated within the State or outside the State, as long as: (1) The residue is used at a solid waste landfill for daily cover, frost protection or other operational or engineering-related purpose, including, but not limited to, landfill shaping or grading, and such use has been approved by the department under the landfill's license and such use complies with all applicable rules of the department and all applicable conditions of the landfill's license; and (2) The use of the residue under subparagraph (1) complies with the requirements of section 1310-N, subsection 5-A, paragraph B, subparagraph (2).



Important Definitions

- **Solid Waste Processing Facilities - 38 MRS 1303-C (32-A):** A land area, structure, equipment, machine, device, system, or combination thereof, other than an incineration facility that is operated to reduce the volume or change the chemical or physical characteristics of solid waste. “Solid waste processing facility” includes but is not limited to a facility that employs shredding, baling, mechanical and magnetic separation or composting, or other stabilization technique to reduce or otherwise change the nature of solid waste.



Requirements for Solid Waste Processing Facilities

- **38 MRS 1310-N (5-A)(B)**
- Solid waste processing facilities generating residue for disposal must submit an annual report demonstrating:
 - All waste accepted at the facility is recycled or processed into fuel for combustion at a rate no less than 50%; and
 - Of the above recycled waste at least 50% must have been reused/recycled through methods other than placement in a solid waste landfill unless it qualifies to meet alternative percentages - 15% in 2022, 20% in 2023.



Requirements for Solid Waste Processing Facilities

- These percentages were modified in 2022, with the passage of **Public Law 2021, Chapter 626: *An Act to Protect the Health and Welfare of Maine's Communities and Reduce Harmful Solid Waste.*** (AKA LD 1639).
- New Percentages are:

January 2022	15%
January 2023	20%
January 2024	30%
January 2025	40%
January 2026	50%



Requirements for Solid Waste Processing Facilities

- **Public Law 2021, Chapter 626** also modified the definition of waste generated within the state per **38 MRS 1303-C (40-A)**.
- Beginning February 1, 2023, if the total weight of the residue generated in a calendar year by a solid waste processing facility that is disposed of or otherwise placed in a solid waste landfill in that calendar year exceeds the total weight of the solid waste initially generated in state for processing at the facility, any excess residue generated by that facility is not considered waste generated within the State.



Recycling Calculations

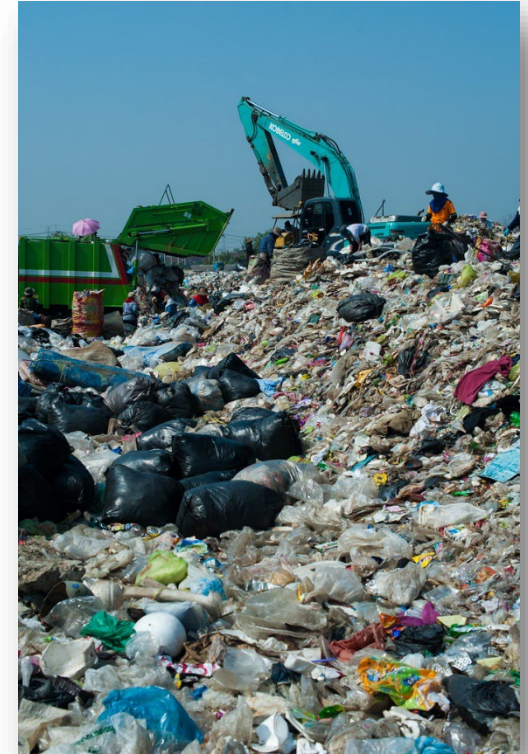
Three separate calculations required

1	Of all waste accepted at a processing facility at least 50% must be recycled.
2	Of the % above recycled – only a % of that may go to a landfill. In January 2023 – that % will be 20%.
3	Add up the residue going to the landfill (for example stuff that can't be recycled) + any materials “otherwise placed” into a landfill (for example alternative daily cover – ADC). This amount may not exceed the amount initially generated in state for processing by that facility in a calendar year.



Where is CDD disposed in Maine

- 4 types of landfills:
 - Landfills that accept CDD from multiple sources
 - Landfills that accept CDD from only Town/member communities
 - Landfills that are less than 6 acres
 - Landfills taking CDD generated on site
- Total disposed statewide: Estimated 645,530 tons
- Range of costs for disposal (Tipping fees): \$33 - \$95



Where is CDD disposed in Maine

- Landfills accept CDD from multiple sources
- Total disposed in 2021: Estimated 605,625 Tons

Landfills	Tons in 2021
Juniper Ridge	497,036*
Waste Management/Crossroads	104,551*
Hartland	4,038*

** These quantities are based on preliminary data estimations for 2021 and may change with further staff review.*



Where is CDD disposed in Maine

- Municipal Landfills taking CDD from Town or Member Communities
- Total Disposed in 2021: Estimated 18,528 Tons

Landfills	Tons in 2021
Hatch Hill	8,139*
Bath	902*
Lewiston	446*
Fort Fairfield – AWS – Tri Community LF	4,214*
Presque Isle - AWS	4,827*

** These quantities are based on preliminary data estimations for 2021 and may change with further staff review.*



Where is CDD disposed in Maine

- Landfills < 6 acres
- Total disposed in 2021: Estimated 20,053 tons
- Approximately half accepted by Rockland
- The remaining municipalities accepting the rest

Penquis SW Corp (Milo)	Norway-Paris*	Oakland*	Baileyville	Brewer
Mid Maine SWA (Corinna)	Old Town*	Glenburn	Greenbush	Mechanic Falls
Central Maine SW Facility (Corinth)	Orono	Rangeley*	Rockport	Rockland

** Some facilities did not report accepting any CDD disposal for 2021.*



Where is CDD disposed in Maine

- Landfills accepting CDD generated on site
- Total disposed in 2021: Estimated 1,324 tons
- Locations reporting disposal in 2021 include:
 - Woodland Pulp
 - Bucksport Mill
 - ND Paper
- Locations that can accept CDD generated on site but did not dispose of any in 2021 include:
 - Sappi
 - Sanford Sewerage District



Recycling of CDD in Maine

Table 2 - Maine CDD Management - Calendar Years 2018 & 2019

Maine-generated CDD disposition	2018 tons	2019 tons	Total tons
Mixed CDD disposed in state	412,783	440,336	853,120
Mixed CDD disposed out of-state	1,495	1,423	2,918
Processed CDD sent to a landfill for daily cover, shaping, and grading*	14,603	16,335	30,939
Processed CDD recycled into new wood products	394	3,966	4,360
Processed CDD beneficially used as fuel	8,943	7,658	16,601
Subtotal Maine CDD recycled & beneficially used as fuel	9,337	11,624	20,961
Total CDD generated in Maine	438,218	469,719	907,937
Maine's CDD recycling rate (all non-landfill uses)	2.13%	2.47%	2.30% (average)

* includes only Maine-generated portion of CDD processing wastes from processing facilities located in Maine



Recycling of CDD in Maine

- 2020 preliminary data:
 - 259,000 tons CDD received by processing facilities
 - Of this 473 tons of CDD fuel was produced
 - 8,061 tons of CDD wood was used in manufacturing
 - 5,400 tons of metal recovered for recycling
 - Remainder was disposed or otherwise placed in LF
- More data will be compiled for 2020-2021 in the Waste Generation and Capacity Report due in January.
- Staff are currently working on compiling data and will be doing so through the fall and winter.



Recycling of CDD in Maine

- Other Considerations
 - Not all CDD is made up of the same materials – lots of variability in each load impacting recycling and reuse opportunities as well as overall tonnage
 - CDD is used for bulking in many landfills for structural support
 - Acceptance of CDD is based on agreements between any mix of generators, municipalities, processing facilities, landfills, transporters, etc.
 - May not be economical for generators to transport CDD for recycling where landfills are closer to point of generation





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