



Resource Management Corporation

## The Coastal Hampden Facility: Concept, Status and Open Questions

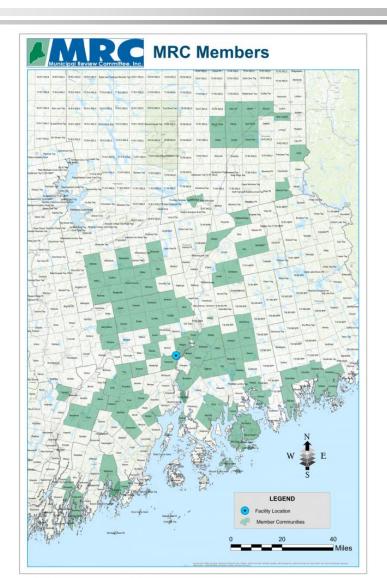
Solid Waste Disposal and Recycling in Maine E2Tech Zoom Webinar

16 September 2020



#### **The Municipal Review Committee, Inc. (MRC)**

- Formed in 1991 to ensure affordable long-term environmentally sound disposal of MSW
- 84 public members serving 115 municipalities
- Sponsored development of the Coastal Hampden Advanced Recycling Facility



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The Coastal Hampden Facility: Concept, Status and Open Questions

#### **The Coastal Hampden Facility: basics**

- Owner Coastal Resources of Maine LLC
- Site Hampden, Maine, off I-95 (Dysart's exit)
- Site owner Municipal Review Committee, Inc. (MRC)
- Customers MRC members (102,513 tons per year) and commercial haulers
- Concept Use Fiberight technology to *process and recycle MSW without source separation*

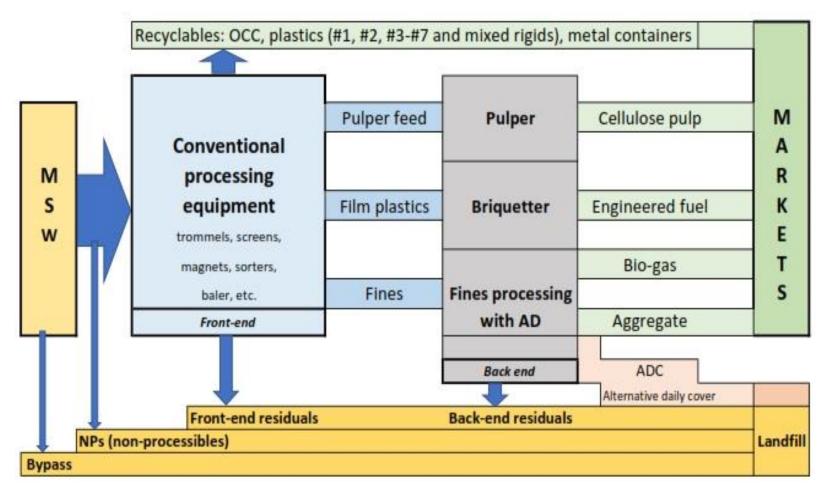
Recover conventional recyclables

Maximize diversion, minimize landfilling



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#### **The Coastal Hampden Facility: Process Flow Diagram**





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Front end - single-sort without mixed paper, film plastic or glass

Back-end - different from other east coast mixed-MSW facilities

Vendor	Location	Back-end products and markets	
Fiberight	Hampden, ME	Pulp for paper or biomass fuel Briquettes to fuel a cement kiln Bio-gas as renewable pipeline gas	
RePower South	Montgomery, AL Monck's Corner, SC	Densified fuel for cement kilns and solid fuel boilers	
Entsorga	Martinsville, WV	Densified fuel for cement kilns and solid fuel boilers	
Sustane Technologies	Chester, NS	Densified fuel for solid fuel boilers Mixed plastics to synthetic diesel	
Zero Waste Solutions	Rochester, MA	None	





#### Pros

- Recover recyclables automatically from 100% of MSW – more recovery at lower cost
- Don't rely on generator to sort recyclables
- No need for separate collection system
- Pulp, briquettes and bio-gas can have more value than mixed-paper, mixed-plastic and compost

#### Cons

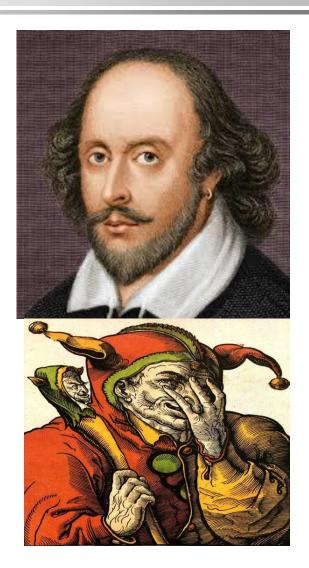
- History: "Those things never work...I told you so!"
- Philosophy: Generators need to sort/confront MSW



# To source separate or not to source-separate, that is the question!

#### **The Coastal Hampden Facility:**

- Is it disruptive technology ?
- Is it a fool's errand ?



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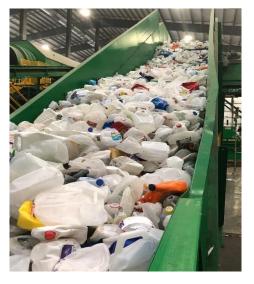
### Performance Test, October 22-28, 2019

	Actual	Standard
MSW processed in 3 days	1279 tons	1200 tons
MSW processed in 3 hours	159 tons 53 tons/hr	135 tons 45 tons/hr
Diversion per mass balance	54.1%	50.0%

- Sold all recovered materials
- Produced quality pulp and briquettes
- Produced more bio-gas than anticipated
- Produced ADC approved for landfill use



#### Materials/products: HDPE, OCC, pulp, gas, briquettes, flags



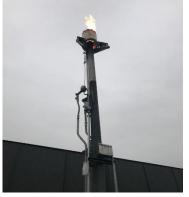




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# Performance Test, October 22-28, 2019

Challenges

- Tanglers, tarps, bulkies and bottlenecks
- Control of fugitive materials
- Efficient recovery of all film plastics
- Back end could not keep up with front end
  - Plastic and moisture in the pulper feed
  - Material became residuals rather than products



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# Maine DEP Beneficial Use Licensing for cellulose pulp and briquettes

- Coastal applied June 2019; license issued May 2020
- Licensing issues: zero waste vs. zero risk
  - Sampling and analysis work plan
  - Document "positive value to the receiving facility"
  - Receiving facilities require "appropriate licenses"
- Coastal not allowed to sell pulp and briquettes in Maine until license issued and conditions satisfied



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# What happened?

October 2019 November 2019 December 2019

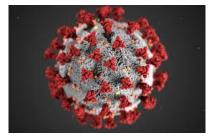
Feb 2020 April 2020 Performance Test: conditional pass Commercial operation begins **Coastal develops Improvement** Plan and seeks additional capital Interim loan (3 months) Bridge loan (12 months) Long-term take-out financing MRC provides interim loan Closing date scheduled for the bridge loan, but ...



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# What happened?

March 2020



May 2020



Covid-19 goes viral New safety measures and costs Recycling markets turn down again Pulp purchasers reduce operations *Financial markets in turmoil* 

Bridge loan falls through Coastal runs out of cash Facility suspends operations



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## What's happening now?

May 2020 June 2020

Jul 2020

Sept 2020

MRC secures the facility MSW bypassed to Crossroads LF, Juniper Ridge LF and now PERC. MRC receives 7 letters of interest from potential investors. Bondholders have state court appoint a receiver for oversight. All parties working to select a preferred re-investment proposal.





### What's next?

- <u>Can they pull it off</u>? Can Coastal get an investor to provide capital, come out of receivership, re-start the facility and operate successfully?
- <u>Will it take off</u>? Will Fiberight mixed-MSW processing technology become disruptive technology for MSW management?
- If not, what will the MRC do for Plan B?



The rollercoaster ride continues...



Palace Playland, Old Orchard Beach

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