



March 13, 2024

**RE: MWS Waste Processing Facility Update**

Dear MRC Members,

We wanted to share a formal update on the ongoing efforts to reopen the Municipal Waste Solutions (MWS) facility in Hampden. Since establishing our partnership with Innovative Resource Recovery (Innovative) eight months ago, MWS has made substantial progress toward its redevelopment plan. Innovative is actively engineering a retrofit of the plant, focusing on enhanced production of renewable natural gas. Most recently, on January 1st, MWS received formal approval from the Maine Department of Environmental Protection (MDEP) to conduct weekly waste test runs. Since that approval, MWS has safely conducted multiple weekly system trials to obtain key data points that will further support the overall system design.

This campaign marks the second set of test runs, with the previous one conducted in July 2023 to ensure the operational readiness of equipment. Over the past nine weeks, small amounts of waste from various locations, including Bangor, Brewer, Orono, Eddington, Clifton, Carmel, and Hampden, have been brought into MWS for processing and testing. The objective of these trials was to assess equipment performance and procure samples that are being used to evaluate gas production potential and refine the system design of the planned anaerobic digestion system.

MWS utilized multiple technical consultants to facilitate these trials, including the University of Maine Process & Development Center, which supported the laboratory work required to properly conduct lab testing and the analyze results of the waste processing. Innovative on-site process engineer oversees all activities and manages the various third-party technical parties to advance the design of the waste processing equipment and anaerobic digestion system, as well as the regionally based technical-service providers MWS has engaged in the project, such as Mid-South Engineering of Orono and Haley Ward of Bangor.

In addition to the technical aspects, coordination with local gas utilities is underway to ensure the safe and reliable injection of Renewable Natural Gas (RNG) into the local distribution grid.



The MRC acknowledges that the reopening of MWS will take time but is very pleased with the depth of expertise Innovative is bringing to bear on this project and the progress that it has made within such a short period of ownership. We commend the Innovative team for its transparency, direct approach, and financial stability. The MRC fully agrees with the Innovative approach and commitment to getting the project done correctly the first time. Their focus is on addressing plant bottlenecks, refining designs, and ensuring the long-term economic viability of the Hampden facility while diverting waste from landfills.

MRC is excited about our partnership and knows that together, we're positively impacting waste management, economic sustainability, and environmental stewardship. The reopening of this facility will not happen overnight, but it will happen.

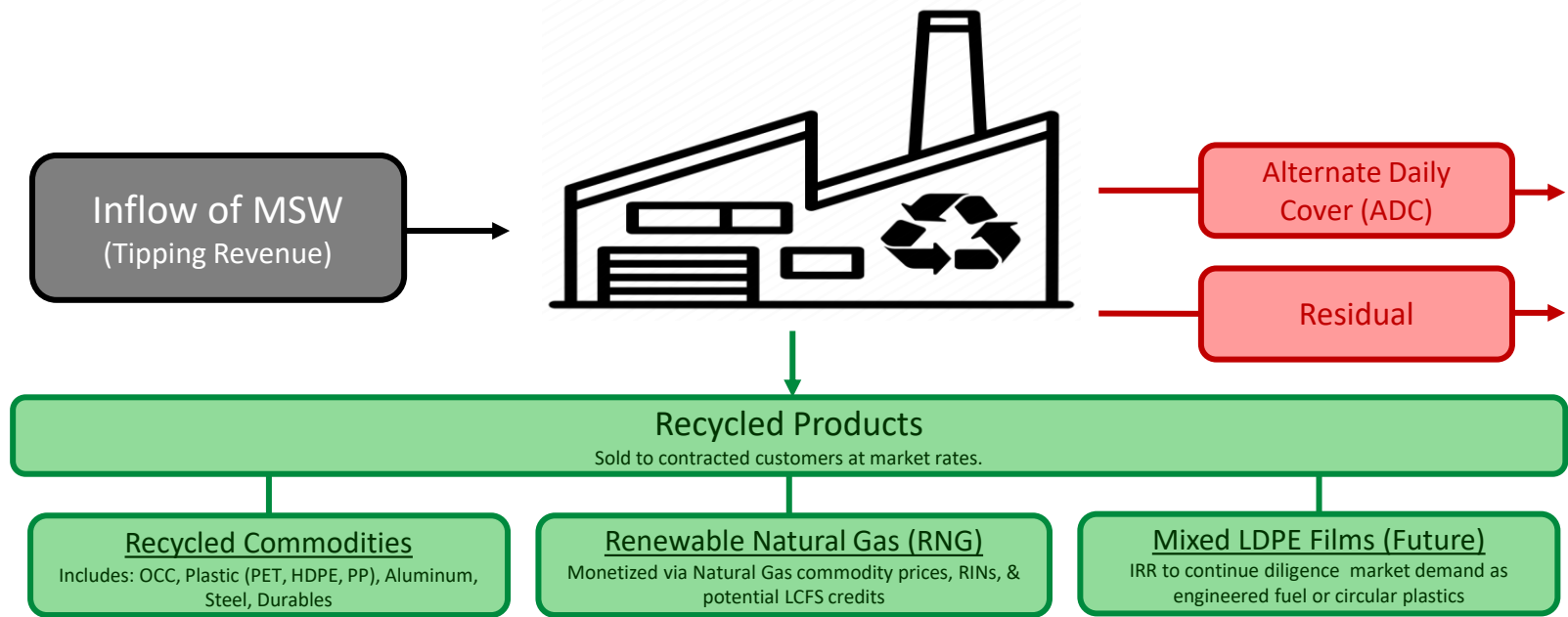
Please share this MWS facility progress with your colleagues and should you have any questions, please do not hesitate to contact MRC Executive Director Michael Carroll at (207) 664-1700 or [mcarrroll@mrcmaine.org](mailto:mcarrroll@mrcmaine.org) or a [MRC Board Member](#).

Sincerely,

A handwritten signature in black ink that reads 'Michael Carroll'. The signature is written in a cursive style and is positioned above the printed name and title.

Michael Carroll  
Executive Director

# Process Overview



- An unfiltered stream of MSW is tipped on the facility floor, mostly comprising of unopened black trash bags. From there, the MRF processes and filters the waste, through several complex sorting techniques, into segregated streams that are then either sold as a recycled product, processed or disposed at a landfill.
- **Recycled Products:** i) Recycled Commodities: Homogenous streams, such as plastics and metals, are baled and sold to local/regional customers for further processing. ii) RNG: Two MRF outflow streams, dense wet paper and food waste, are sent through anaerobic digestion systems to generate biogas that is upgraded to natural gas quality and injected into the pipeline, and iii) Mixed LDPE Films: Films (plastic bags) can be sent through a densification process to make an engineered fuel or can be processed for circular plastics.
- **Landfill Disposal:** Outflow MRF streams that are contaminated and cannot be further processed or sold are disposed at landfills as a Residual. However, ~50% of the total landfill disposal meets characterization of an ADC and can be tipped at a lower price since used for landfill topping/capping.
- **Additional Landfill Disposal:** Residual streams generated from the anaerobic digestion process that is sent to the landfill. Deal Team continues to diligence the SRF market/tech to identify regional demand. If the SRF process is inactive, which is applicable in the Stress Case, the respective stream diverted to landfill.