

Municipal Review Committee, Inc.
Solid Waste Management Capacity in Maine

What has been the balance of supply and demand for capacity for processing or disposal of municipal solid waste (MSW) in Maine? In January 2015, the Maine Department of Environmental Protection provided a report to the legislature called the Maine Solid Waste Generation Disposal Capacity Report for Calendar Year 2013 (the DEP Capacity Report), which characterized the need for solid waste management capacity in Maine based on the most recent data available for a complete year.

The DEP Capacity Report indicated actual capacity in Maine for disposal of approximately 773,000 tons of MSW at three waste-to-energy facilities, the state-owned Juniper Ridge Landfill, the privately-owned Crossroads Landfill, and a handful of municipal landfills as follows:

Waste-to-energy facilities	513,611 tons
Juniper Ridge Landfill	60,980 tons
Crossroads Landfill	75,574 tons
<u>Municipal landfills</u>	<u>75,277 tons</u>
Total MSW disposal capacity	773, 352 tons

In that same year, the DEP Capacity Report indicates a total need for disposal of MSW originating in Maine of approximately 681,000 tons as follows:

MSW generation in Maine	1,161,579 tons
MSW recycled	(467,782) tons
<u>MSW composted</u>	<u>(12,674) tons</u>
MSW disposal	681,123 tons

Thus, in 2013, Maine had approximately 92,000 more tons of capacity for disposal of MSW than there was MSW being generated. How was the extra disposal capacity used? The DEP Capacity Report indicates that

- About 68,000 tons of MSW was imported from outside of the State of Maine to disposal facilities inside of Maine – the majority of which was imported by the PERC facility.
- About 24,000 tons of disposal capacity for MSW went unutilized.

With the supply of disposal capacity exceeding demand, the laws of economics tell us the price for disposal capacity, as measured by market tip fees, would stay low. And it did – market tip fees ranged from \$30 per ton to \$80 per ton at various facilities in Maine depending on location and the time of year.

How would the balance of supply and demand have changed if the PERC facility was closed? In 2013, the DEP Capacity Report shows that the PERC Facility processed 306,875 tons of MSW, of which 265,183 tons originated in Maine and 41,692 tons originated outside of the state of Maine. If this capacity had not been available:

- Total MSW disposal capacity in Maine would have declined to 466,477 tons.
- As a result, instead of a *capacity surplus* of 92,229 tons, Maine would have experienced a *capacity shortfall* of 214,646 tons.
- Under shortfall conditions, all available capacity would be used, there would be no space for out-of-state waste – and Maine would have been forced to find other ways for disposal of its surplus MSW. Options might involve new measures to increase waste diversion and recycling; export of MSW from Maine to other states; and allowing more disposal of MSW in the state-owned and commercial landfills.
- With the market demand for disposal capacity exceeding supply, the laws of economics tell us that market tip fees in Maine would spike well above the range of \$30 per ton to \$80 per ton from recent experience.

What does the analysis tell us about the disposal capacity market if the PERC facility closes in 2018? The conditions around the disposal capacity market in 2018 will be different from 2013. Some towns have reduced their MSW generation rates through new pay-as-you-throw programs. Some towns have increased their diversion rates through new single-stream recycling and other programs. Maine’s population has not changed much, the economy has improved in some areas and declined in others, and the overall amount of MSW delivered to PERC from the Charter Municipalities has been declining modestly from year to year. The basic conditions underlying the balance of supply and demand for capacity, however, remain about the same:

- If the PERC facility closes in 2018 without being replaced, Maine will experience a capacity shortfall in the range of 170,000 to 220,000 tons per year. The actual value of the shortfall will depend on the level of changes in waste generation and diversion rates.
- Under shortfall conditions, all available capacity will be used, municipalities will be competing with each other for available space at existing facilities – and tip fees will spike up quickly. Towns should NOT expect that market tip fees after 2018 will be as low as they are today with excess capacity available.

This is the logic that has led the MRC to sponsor the development of the Fiberight facility with capacity to process in the range of 150,000 to 220,000 tons per year of MSW. The addition of the Fiberight facility in 2018 would fill the gap in disposal capacity resulting from the closure of the PERC facility, provide market balance and stabilize tip fees inside Maine without the need to import waste from outside of Maine.