9/5/2023

Town of Stratford

Construction & Demolition Debris Diversion Recommendation Report

Date of visit: August 4, 2023

The Northeast Resource Recovery Association (NRRA) conducted a site visit for the Town of Stratford to evaluate the town's construction and demolition debris (C&D) management practices. This report provides a summary of the town's current practices and NRRA's recommendations to both increase C&D diversion and reduce costs and greenhouse gas emissions.

FACILITY USAGE

To use the facility, a person needs to be a resident, taxpayer, or be a business operating in the town. Commercial trash and recycling are accepted but commercial C&D is not accepted.

TRANSPORTATION & TIPPING FEES

The town's current rates for hauling their material to the Mt. Carberry Landfill in Berlin, NH was \$400 per haul in 2022. The town had a mixed demolition debris and bulky waste tipping rate of \$60 per ton in 2022. The mileage from the haulers yard to the Transfer Station and then delivery to Mt. Carberry Landfill and back is 78 miles.

TONS:	TIPPING:	HAULING:	TOTAL COST:	COST/TON:	COST/POUND:
3	\$180.00	\$400.00	\$580.00	\$193.33	\$0.097
4	\$240.00	\$400.00	\$640.00	\$160.00	\$0.080
5	\$300.00	\$400.00	\$700.00	\$140.00	\$0.070
6	\$360.00	\$400.00	\$760.00	\$126.67	\$0.063
7	\$420.00	\$400.00	\$820.00	\$117.14	\$0.059
8	\$480.00	\$400.00	\$880.00	\$110.00	\$0.055
9	\$540.00	\$400.00	\$940.00	\$104.44	\$0.052

MIXED C&D OPEN TOP CONTAINER

The town, like most towns in the North Country, combines their C&D and bulky waste (furniture, etc.) together. They also mix in their glass, as they do not currently have an alternative outlet for it. They do try to keep lightweight items, like plastic and Styrofoam, out of the open top and have people dump those in the municipal solid waste (MSW compactor instead, as the compaction rate is much higher than densifying material with a backhoe.

SHINGLES

Asphalt shingles are placed directly into the same open top container as the other C&D by residents and are sent to the landfill for disposal. The town does not offer a recycling option. The town charges \$100 for a pickup truck load.

YEARLY TONNAGE

The yearly tons of C&D managed varied somewhat between 2020 and 2022. The three-year average was 124.24 tons. This equates to an average of 20,706 pounds per month. The per capita yearly average was 375.35 pounds per person per year.

2022	2021	2020
127.48	112.87	132.36

DENSIFYING MATERIAL

The town compacts their open top by hiring a local person. The individual charges \$50 per compaction and their backhoe is stored on the facility property. Compacting the material allows the facility to get between 5-to-8 tons per container. On average, the container is compacted once or twice per week, and is hauled once a week.

The cost savings from compacting are clear. For example, if the facility compacts the container two times in a week, and the weight goes from 3 tons to 5 tons, the town will save approximately 6%. If they can go from 3 tons to 6 tons, then it is a 19% savings. Additionally, increasing the container weight from 3 tons to 6 tons would cut the emissions from hauling the material in half, by allowing the heavier amount of material to be hauled once, rather than the lighter weight containers hauled twice.

HANDLING

All C&D is loaded directly into an open top container, which saves labor time compared to first dumping into a bay then loading into an open top. However, this set up does make it more challenging for large loads of material to be dumped. Labor costs are minimal and include load inspection and charging customers.

RECYCLING OPTIONS

The closest C&D recycling facility is around 109 miles away located in Colchester, Vermont. With the low tipping rate, and the longer distance to a recycling facility, the town is currently doing what is best financially for the taxpayers and users of the facility.

The town does a good job of separating non-ferrous metals to sell at a higher price than regular scrap metal. During the visit, NRRA staff looked at copper piping, wire, aluminum siding, and other items that the town sells.

REUSE OPTIONS

The facility does allow for some reuse of items. While they do not have a large area, they are organized, and ensure only quality items for reuse are available for others to take.

RECOMMENDATIONS

Asphalt, Brick, Concrete (ABC) – If Northumberland or another town becomes a consolidation point for ABC in the future, Stratford could then send customers directly to the accepting facility.

Reuse Options – The facility does have a small reuse area. They could look at expanding the area some to allow more items. There are no reuse stores in the area. NRRA recommends that the facility promotes the utilization of existing social media groups, such as Craigslist, the "free stuff" section of Facebook Marketplace, or the "North Country Market Post It Here" Facebook group to residents and facility customers. This would allow people to give away items before bringing the items to the facility for disposal.

Glass – We recommend that the town look into glass recycling options. One of NRRA's vendors needs 30 tons of clean glass at a time and can only accept glass bottles and jars. The Stratford Transfer Station is not currently set up to utilize this program. As a second option, Stratford could bring glass bottles and jars, plus porcelain, Pyrex, and ceramics to the closest NRRA Glass Consolidation Site in Littleton, which is 83 miles away. Regarding transportation to the NRRA Glass Site, it is possible that Stratford's hauler, Normandeau, Inc., could combine their haul from

Stratford with another town they haul for in the Littleton area (ex. Franconia). This may cut hauling prices down compared to a straight haul. This could be done by bringing the open top that has glass in it from Stratford to Littleton, dumping the glass, bringing the now-empty container to Franconia, and finally, swapping it with Franconia's full C&D open top container. If hauling costs are equal to sending it to the landfill, the town could save roughly \$15 per ton.

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