



Northeast Resource Recovery Association

"Partnering to make recycling strong through economic and environmentally sound solutions"

9/5/2023

Coos County Transfer Station

Construction & Demolition Debris Diversion Recommendation Report

Date of visit: August 4, 2023

The Northeast Resource Recovery Association (NRRA) conducted a site visit for the Coos County Transfer Station to evaluate their 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.

The Coos County Transfer Station accepts material from the New Hampshire towns of Columbia and Stewartstown and the Vermont town of Lemington, serving 1,572 people in total. In addition, the facility is unique because not only is it a partnership between multiple towns, but it is also a partnership with the County.

FACILITY USAGE

To use the facility, a person needs to be a resident or property owner of one of the towns. When a person drops an item off, the attendant asks for the customer's name and town of residence or property ownership.

TRANSPORTATION & TIPPING FEES

The facility uses the Mt. Carberry Landfill in Berlin, NH for disposal of their C&D. Since the facility is in an area with a small population, options for haulers are slim. Their current hauler has a port-to-port drive of 126 miles. The 2023 haul rate is \$609.25 per trip plus a fuel surcharge if applicable. The facility pays a tipping rate at the landfill of \$72 per ton.

CONSTRUCTION & DEMOLITION DEBRIS COMPOSITION

The facility combines bulky waste, such as furniture, and C&D. This is common practice for most of northern New Hampshire as there is no local place to recycle C&D.

ASPHALT/BRICK/CONCRETE (ABC) & ASPHALT SHINGLES

Since the facility has a small footprint, there is no area dedicated to separating ABC or asphalt shingles. These items are disposed of with the rest of the C&D.

YEARLY TONNAGE

The yearly tonnage of C&D managed was very consistent between 2020 and 2022. According to the annual facility report, their yearly tonnage varied from 197 tons to 205 tons across a three-year span. The per capita rate for the last three years was 255.13 pounds per person per year.

YEAR	C&D TONS:	MSW TONS:	RECYCLING TONS:
2022	200.53	592.69	168.36
2021	205.09	623.73	155.38
2020	197	680	188.60

2022 – Percentage of C&D/Bulky was 20.85% of total material received.

2021 – Percentage of C&D/Bulky was 20.84% of total material received.

2020 – Percentage of C&D/Bulky was 18.49% of total material received.

DENSIFYING

The facility hires a person with a backhoe to compact their containers. They average 1.7 crushes per container based on the November 2022 to July 2023 statistics. During that period, every container (21 hauls) received one crush, 62% received a second crush, and only one received a third crush. Each crush costs \$150.00. From looking at the report from November to July, the only 3rd crush, and the majority of the second crushes where due to the open top being overfull and the facility needed to either get through the day or prepare the container level with the top for hauling purposes. Every container had a crush.

The cost savings from compacting are clear. For example, if the facility compacts the container once, and the weight goes from 3 tons to 5 tons, the town will save approximately 18.6%. If they can go from 3 tons to 6 tons on two crushes, then it is also an 18.6% savings. Additionally, increasing the container weight from 3 tons to 6 tons would cut the emissions from hauling the material in half, minus the emissions from the backhoe.

HANDLING

All C&D is loaded directly into their open top container, which saves labor time compared to first dumping into a bay then loading an open top. However, this does make it difficult to dump larger loads of material. The labor costs are minimal and include load inspection and charging customers. It should be noted that if the open top container is full, there is the possibility that some items will need to be set to the side, especially bulky items like furniture. This can result in increased labor costs.

RECYCLING OPTIONS

The closest C&D recycling facility is 123 miles away in Colchester, Vermont. With the Transfer Station's current low tipping rate and the longer distance to a C&D recycling facility, the facility is currently doing what is best financially for both the taxpayers and facility customers.

RECOMMENDATIONS

Cover – To keep snow and rain out of C&D, the facility may want to explore options such as purchasing or building a cover for the open top, though the cover would need to be easily moveable by a single person. This could save the facility some money as rain and snow can add weight to a container.

Light Material – Even with compacting the open top with a backhoe, NRRRA recommends asking people to throw lighter materials such as plastic and Styrofoam in with the Municipal Solid Waste (MSW). The MSW compactor has a better compaction rate than densifying material with a backhoe. This change would result in less hauls to the landfill, and therefore lower costs and lower greenhouse gas emissions from reduced transportation.

Reuse Options – There are no reuse stores in the area. The facility does not have a reuse area, but the operator will allow small items to be set aside if the operator thinks that it will be reused. NRRRA 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.

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