Construction and Demolition Waste Diversion

Presented by

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Solid Waste

August 2024 Action Items Review and Progress

- *Hire Solid Waste Inspector to assist with enforcement of Mixed Load/Diversion Ordinance*
- *Internally perform pilot sorting project to collect more data on incoming loads*
- *Continued collaboration internally with building and demolition permit language*

Data can help guide:

- Work towards developing C&D Diversion plan with contractors
- Benchmark other communities and their policies for C&D waste
  - Catawba County
  - New Hanover
- Reduce daily C&D capacity at the transfer station to encourage load delivery to the landfill
- Consider rejecting large demo project waste-(Examples, historic projects from Duke and natural disaster debris and demo)
- Consider rejection of loads containing large volumes of brick/concrete
- Evaluate increase tip fee for “undesirable” waste streams
- Consider initiating recycling shed/swap shop for usable C&D materials at landfill
- Continue educational outreach, targeting groups such as Asheville Builders Association

CURRENT C&D DIVERSION PRACTICES

- Landfill accepts source separated C&D materials for recycling at a reduced/free rate: (Note these materials have a local market for recycling)
  - Clean Concrete and brick: 50% off tip fee ($25/ton)
  - Clean wood: reduced tip fee ($20/ton)
  - Scrap Metal: Free
  - Cardboard: Free
- Reduced C&D acceptance daily at the transfer station to encourage load delivery to the landfill
  - *Transfer Station cap at 25 tons/day*
- Strengthen program to enforce mixed load ordinance
  - *Solid Waste Ordinance applies a double tip fees fine for mixed C&D material*

C&D WASTE AND DIVERSION RATES

Material Type	FY20	FY21	FY22*	FY23*	FY24	FY25
C&D Waste	32,492	44,341	88,567	80,007	68,100	54,776
Concrete/Brick	4,740	2,780	2,300	3,017	5,879	4,743
Yard Waste	2,007	2,472	2,369	2,598	2,543	7,274
Metal	718	800	757	753	716	760
Cardboard	273	361	382	379	339	411
Total Tons Diverted	7,738	6,413	5,808	6,747	9,477	13,188
Diversion Rate	*19.23%*	*12.64%*	*6.15%*	*7.78%*	*12.22%*	*19.40%*

*Duke Energy construction project

LOOKING FORWARD

C&D Waste Audit and Characterization Study



Create or Utilize C&D Sorting/MRF Infrastructure



Explore and secure reliable end markets for recyclable materials



August 2025

FUTURE DIVERSION OPPORTUNITIES

- C&D Waste Audit scheduled at all solid waste facilities week of August 18th including C&D diversion layout areas and sketches
- Evaluate feasibility of a C&D Sorting Facility to capture more materials that currently have a local market for recycling
- Yardwaste and Clean Lumber Potential Initiatives:
  - Evaluate outlets for clean lumber
  - Use of yardwaste for compost facility

MARKET DEVELOPMENT REQUIRED IN OUR AREA TO DIVERT THE FOLLOWING MATERIALS:

- Shingles
  - Robust recycling market available in 2016
    - A year later asphalt plants experienced too many contamination issues
  - NCDOT allows 4% shingles into asphalt mixture
  - Closest Asphalt Plant accepting shingles for processing is 3.5 hours away, most in Eastern NC
  - Continue conversations with local asphalt plants for future opportunities
- Sheetrock
  - Investigate potential as an additive in commercial compost



NEW HANOVER C&D SORTING FACILITY

- C&D recycling facility on site
  - $1.8 million investment (2014), 30 ton/hour capacity
  - Operating costs: $18-19 per ton, includes labor (contracted) 4-6 staff hand-sorting, frequent staffing issues, routine maintenance
  - 65% recovery from incoming loads, cardboard is only material generating revenue
  - Lumber, metals, white goods, sheet rock, shingles, cardboard, aggregate
    - Used both in-house and **sold to nearby private end markets**



ACTIONABLE ITEMS

- C&D waste audit and data analysis
- Securing outlets and laydown areas for material
- Continue to enforce mixed load ordinance
- Further evaluation of capital project options