

Construction & Demolition Waste

The Orange County
Regulated Recyclable
Materials Program



Objectives

- Background
- BOCC Goals
- Staffing & Funding
- Applicable Areas
- Ordinance Standards
- Materials
- Options
- Commercial Sector Differences

Background

- In the late 1990's it was recognized that the construction and demolition (C&D) landfill on Eubanks Road was going to be filled sometime in 2003.
- The Orange County Board of County Commissioners agreed to build a new C&D landfill but only if certain bulky materials were required to be recycled.
- As a result, the RRMO went into effect on October 1, 2002.
- The equivalent of 1 mid-size home is discarded each week based on waste generated in OC.

BOCC Waste Reduction Goals

- In 1997 Orange County and the Towns adopted a 61% per person waste reduction goal.
- C/D Program
- Electronics Program
- Food Waste Program
- Commercial/Residential Recycling
- Drop off site/Convenience Centers
- Household Hazardous Waste

Areas Impacted

- Town of Chapel Hill, including annexed areas of Durham County
- Hillsborough
- Carrboro
- Unincorporated Orange County
- Mebane has chosen not to participate at this time

Staffing

- Staffing
 - 2 full-time positions
 - Enforcement Supervisor
 - Environmental Enforcement Officer
 - ½ Position in Inspections
 - Issues permits on our behalf for small projects
 - Shared position w/OC Inspections
 - Portions of 1 inspector at OC Landfill

Funding

- Hauling Licenses (\$25.00 per vehicle)
- Certified Facility Reviews (\$250.00)
- Regulated Materials Permits w/all building permits (8% of permit cost—5% /3% share with permitting agency)
- Roughly 90% self funded –some offset from C/D and/or MSW tip fee

Staff Directives

- Enforce the Regulated Recyclable Material Ordinance (RRMO). Issue permits and Licenses.
- Develop infrastructure to provide recycling capacity for regulated/banned materials
- Work with all county entities to ensure that all construction permits issued within the county
- adhere to the recycling requirements pertaining to the RRMO.
- Education of construction and demolition generators and haulers regarding waste reduction,
- recycling and deconstruction.
- Assist the Towns and County with the Solid Waste Management Plan Development Review
- process to ensure that adequate recycling infrastructure within all County developmental projects is consistent with waste reduction goals
- Enforce illegal dumping, burning and other solid waste ordinances

Metrics

<i>Construction Waste Mgmt</i>	2006-07 Actual	2007-08 Actual	2008-09 Budget	2008-09 Estimate	2009-10 Projected
Solid Waste Mgmt Plan/Development Review	130	225	130	210	175
Pre-construction meetings	175	60	180	175	125
Licenses	275	250	250	175	250
Certifications	2	2	2	2	2
Permits	1600	1500	2170	1600	1750
Appeals	0	5	5	0	0
Revocations	0		5	0	0
Citations	2	10	10	25	30
Stop Haul Orders	1	1	5	0	0
Verification Tags	369	721	720	650	650

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RRMO Summary

- Must recycle clean wood, metal, cardboard
- Vehicles must be licensed
- Bulk recycling containers must be numbered
- Mixed loads must be taken to certified MRF
- Must report county of origin
- Must maintain and report certain information to qualify for renewal
- Penalties for not complying
- Applies to material not a specific sector

Enforcement

- Daily Inspection of Commercial Businesses and Construction sites
- Placement & Tracking of Verification Tags
- Citations to haulers and/or generators for violations
- Mixed Load Tickets for commingled loads at Orange County landfill
 - Double Tip fee
 - Double Tip fee PLUS \$400 if over 50% OCC
- Stop Haul Tags (Red)

Construction

- Construction/Demolition waste should be free of contaminants not generated by construction or demolition of buildings
- New state interpretations making life a little more difficult
- Warning Tags on Roll-offs
- Several Handling options

Certified Recycling Facilities

- Loads of mixed materials must be taken to a certified recycling facility.
- Loads of segregated materials may be taken to another recycler, including the Orange County Landfill.

Coble Sandrock

- 5833 Foster Store Road
- Liberty
- 336-565-4750
- Brenda or Kent Coble
- 29 miles from center of Chapel Hill

WCA-Raleigh Reclamation

- 421 Raleigh View Rd
- Garner
- 919-838-6973 office
- Dennis Gehle
- 32 miles from center of Chapel Hill



Shotwell Apex Transfer

- 1502 N Salem Street
- Apex, NC 27502
- 919-427-0288
- Hours
- Monday through Friday
- 7a to 4 pm
- daviddebris@bellsouth.com

Commercial Sector

- Includes apartments
- Retail
- Offices
- ETC
- Ordinance applies to MATERIAL not a specific sector
- More difficult to deal with
- Roll-Offs of material from stores cannot generally go to a C/D landfill; therefore, keep Regulated Materials out of roll-offs
 - Generally cardboard is the biggest issue with this sector

Dealing with Commercial Sector

- Make sure they have a cardboard dumpster
- Conventional recycling (glass, plastic, paper, etc)
- Industry Specific Waste
 - Food/Grease
 - Industry by-products (wood shaving etc)
- OC will conduct a waste audit

Commercial Businesses example

Date	Penalty	Tip	Total
2/26/2008	472.38	72.38	544.76
2/28/2008	47	47	94
2/13/2008	512.33	112.33	624.66
2/18/2008	499.17	99.17	598.34
2/7/2008	503.87	103.87	607.74
2/21/2008	492.12	92.12	584.24
Total	2526.87	526.87	3053.74

Orange County Facilities

- MSW Landfill (soon to close)
- C/D Landfill (25-30 year life expectancy)
- Full Service Recycling
- Electronics Recycling
- HHW
- Ordinance Area

Orange County Facilities



Orange County Facilities



Results

- C/D Material landfill reduced 33-35% average each year
- Increased awareness
- Overall waste reduction increases
- Builders/Designers/Owners thinking about waste diversion earlier in process
- First 4 years increased C/D recycling 212% (from almost 0 to 8400 tons in 2005)

BUT...

- 40-50 % Drop in incoming C/D to OC Landfill
- Slow in housing market has resulted in new complications:
 - Grapple style haulers working multiple counties
 - On Site Separation companies getting harder to find
- Enforcement in commercial sector is very time consuming
- Demolition can add a layer of complexity

What's next

- January
 - Revised Ordinance to remove exemption for collectors less than 9,000 pounds
- Winter/Spring
 - Hopefully secure drywall recycling program

DECONSTRUCTION

- County has conducted 4 full scale deconstructions
- Several large private projects have had some level of deconstruction short of complete deconstruction
- New Chapel Hill rules MAY increase deconstruction

Contact Information

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