

# Managing Solid Wastes in Transportation Projects



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SOLID WASTE SECTION



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Portland Cement Association





## **Solid Waste Section**

Regulates safe management of solid waste through technical assistance, regulations, permitting, environmental monitoring, compliance evaluation and enforcement.

### **Waste types regulated involved in transportation projects:**

- **Construction and demolition wastes**
- **Land-clearing waste**
- **Scrap tires**
- **Asphalt shingles**
- **Glass**
- **CCB**



## Beneficial Fill

Types of Materials

Rule



- Inert Debris Only - unpainted concrete, brick, concrete block, uncontaminated soil, rock, and gravel
- No exposed rebar
- 15A NCAC 13B .0562
- NCGS allows used asphalt
- No excavation
- Improve potential land use/other approved use
- Not exempt from other local, state or federal law/rule (zoning, erosion control, stormwater, etc)
- Cannot contravene 2L standards



## Beneficial Fill

Non-Hazardous  
Painted Materials

- Painted materials (brick, concrete, etc) must meet unrestricted use standards to be used as fill.
  - Multi-step process to meet Unrestricted Use
    - Perform Totals Analyses (8 RCRA Metals) and compare to IHSB Soil Remediation Goals table
- <http://portal.ncdenr.org/web/wm/sf/ihsguide>
1. Pass Residential Health Based Soil Remediation and Protection of Groundwater = Unrestricted Use
  2. Pass Residential Health Based Soil Remediation but fail Protection of Groundwater = must perform SPLP or TCLP and compare to 2L. If Below 2L, then unrestricted use
- Either scenario allows for use as fill
  - Anything failing the residential health based goal or 2L must go to permitted landfill (C&D or MSW)
- \*Process is subject to change due to law/rule changes.



## Re-Use /Recycling

Used Concrete/Asphalt

Asphalt shingles



- Grinding of used concrete/asphalt for re-use as aggregate or fill doesn't require permit/approval
- If painted, should meet same unrestricted use standard as beneficial fill
- Asphalt shingles
  1. Post consumer reclaimed shingles: Best Practices Guide – Carolina Asphalt Paving Association
  2. DAQ plant permit – requires source separation and asbestos testing



## Re-Use /Recycling

Other approved uses:

Scrap tires

Glass



Epa.gov

- **Scrap tires**
  1. **Traffic Drum base**
  2. **Embankment/Retaining wall fill:**  
**Chipped tires preferable to whole tires due to movement over time**
  3. **Rubber Mulch**
  4. **Asphalt mix additive**
  
- **Glass**
  1. **Pavement Markers**
  2. **Aggregate base**
  3. **Sub-drain fill**



## Management of Land Clearing Debris (LCD)

On-Site / Project

Off-Site /Project



- .0563(5) -LCD generated within NCDOT Project ROW can be disposed in Project ROW as long as:
  1. Disposal area less than 2 acres in size
  2. Meets .0564 siting requirements, except zoning
- LCD generated as part of NCDOT project does not require permit/approval for grinding within project boundaries.
- DAQ permit to burn LCD
- Disposal and/or wood grinding operations outside the project boundaries (i.e. County Maintenance Yard) are subject to Solid Waste permitting/approval requirements



## **Coal Combustion By-Products (CCB)**

- Use of CCB is regulated under 15A NCAC 13B .1700
- Written notification of the Division is required 30 days prior to fill project start.
  - a. Should be noted in NCDOT construction plans and plans maintained for review.
  - b. DWM and DOT may agree on specific design and construction criteria depending on project.
  - c. DOT must submit certification to the Division within 30 days of completion of project noting rules have been followed. Must be signed by PE or Sec. of DOT.
- Does not require permit if used/approved by NCDOT for traction control or road surface material





## Other Solid Waste Items of Importance

- Construction and Demolition wastes (minus inert materials) generated as part of DOT projects must be disposed at an DWM permitted facility, not used as fill in reclaiming borrow sites.
- Animal mortality encountered on DOT roads must be disposed at an DWM permitted facility.
- No permit is required to grind debris to clear roads for travel or utility maintenance, however the stockpiling of debris on DOT owned/controlled or other properties is subject to DWM approval. This is the same during normal business and emergency/ disaster response scenarios.
- **All information contained in this presentation is valid at the date of the presentation. It is subject to re-evaluation and modification as laws, rules, and/or policy changes occur.**
- If you have any questions or need assistance in locating disposal sites, please contact the Environmental Sr. Specialist for the county in which the DOT project is to occur.

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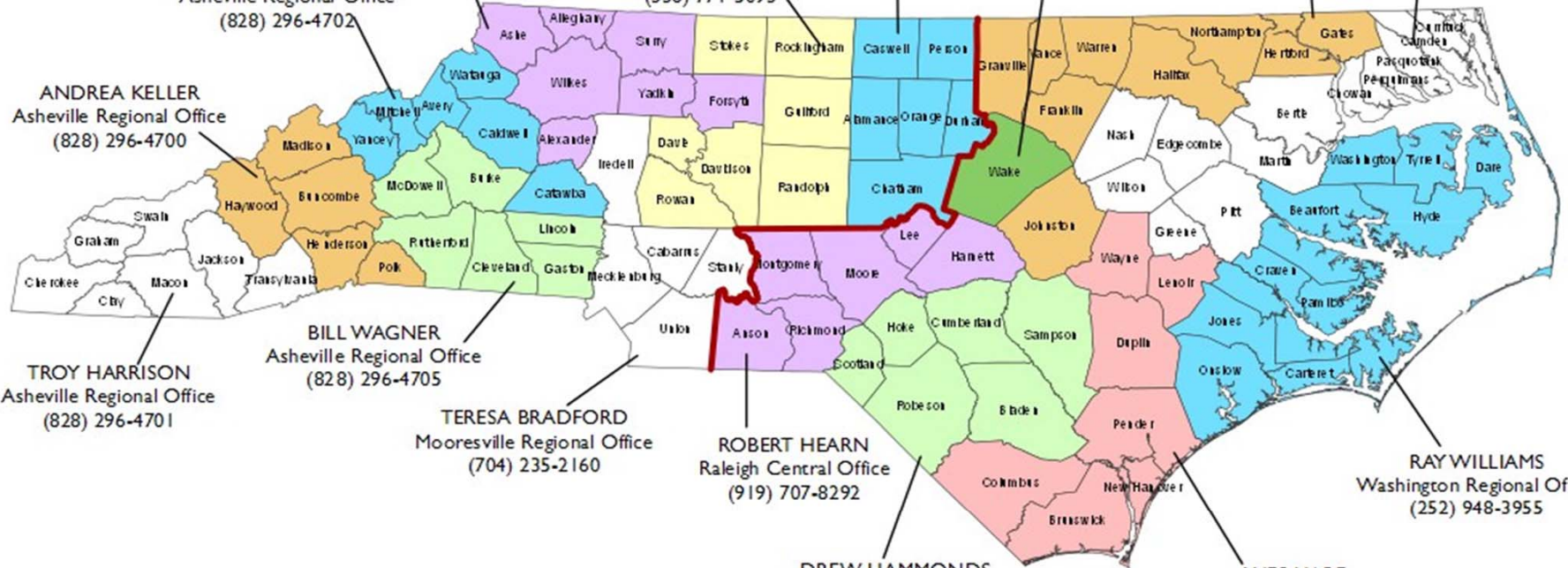
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