CONSTRUCTION & DEMOLITION MATERIALS UPDATE

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WHAT ARE C&D MATERIALS?

- Materials generated when new buildings and civil-engineering structures are built and existing ones renovated or demolished.
- Include:
  - Asphalt, Brick and Concrete;
  - Wood;
  - Gypsum Wallboard;
  - Metals;
  - Glass;
  - Plastics;
  - Salvaged building components; and,
  - Trees, stumps, earth, and rock from clearing sites (land clearing debris).
C&D MATERIALS GENERATION ESTIMATES

- C&D materials generation estimates:
  - 516 million tons (2012)
  - 526 million tons (2013)
  - 534 million tons (2014)
- MFA approach based on consumption data, job-site data, and material lifespan assumptions.
- Includes information on different sources and sectors contribution to total.

Concrete, 70%
Asphalt Shingles, 3%
Brick and Clay Tile, ...
Steel, 1%
Drywall and Plasters, 3%
Wood Products, 7%
Asphalt Concrete, 14%
4 UNDER DEVELOPMENT: C&D MATERIALS MANAGEMENT PATHWAYS

• An ongoing effort to develop estimates for the final disposition (pathway) of C&D materials by material and mass.
  • Pathways: landfill, remanufacture, use in fuel, mulch, aggregate, etc.

• Total C&D generated is grouped into 3 material streams to allow measured data to be used where available to estimate the pathways.
Mixed C&D: Asphalt Shingles Pathways Example

- Literature composition studies, MRF interviews and state data
- Percentage of asphalt shingles in the stream
- MRFs and trade associations data on management pathways

Total Diverted Mixed C&D Amount

Fuel

Re-manufacture

Asphalt aggregate
THE STATE OF THE PRACTICE OF CONSTRUCTION & DEMOLITION MATERIAL RECOVERY REPORT
State of the Practice Report Overview

- Product of EPA’s Office of Research & Development
- Report addresses the following questions:
  - How are C&D materials managed?
    - Amounts generated/recycled; recycling process; and end markets.
  - What are example key factors that influence recovery?
    - Economics, state and local policies, green building programs.
  - What are example key environmental and human health considerations associated with processing materials?
    - Best practices to reduce worker exposure and cross-contamination of materials.

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