

# **C&D** Waste Diversion and Reuse

#### Meeting Your Executive Order 13514 Goals Best Practices, Tools, and Resources

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## **Federal Requirements**

#### • Executive Order 13514

- § 2(e)(iii): Promote pollution prevention and eliminate waste by diverting at least 50 percent of construction and demolition (C&D) materials and debris by the end of FY 2015
- Guiding Principles
  - During a project's planning stage, identify local recycling and salvage operations that could process site-related C&D materials
  - During construction, recycle or salvage at least 50 percent of the nonhazardous construction, demolition, and land clearing materials, excluding soil, where markets or onsite recycling opportunities exist
  - Provide salvage, reuse, and recycling services for waste generated from major renovations, where markets or onsite recycling opportunities exist



## **C&D** Waste Diversion and Recycling

Salvaging, reusing, and recycling C&D material is required for all federal renovation, demolition, and construction projects. To get it done:

- Get your documents right: Architecture and Engineering (A&E) Statement of Work, Construction Specifications, Solicitation for Offers language
- Clearly delineate responsible parties for C&D data collection and reporting: A&E, LEED Consultant, Owner, Contractor
- Develop a construction waste management plan
- Instruct onsite contractors and subcontractors
- Establish and clearly identify onsite C&D material collection and storage locations
- Require a C&D waste report documenting collection methods, material

types, recovered weight, and recipient(s) of the material

#### **Construction Waste Management Plan**

A Construction Waste Management Plan generally covers:

- Materials collected (types, weight/volume)
- Collection methods and material management (e.g., onsite sorting or commingling; onsite processing [compacting, crushing, baling])
- Material disposition (receivers of materials)
- Designation of responsible parties for C&D data collection and reporting process
- Reporting frequency (e.g., monthly)
- Education of and signage for contractors and subcontractors
- Compliance monitoring



## **Data Collection and Recordkeeping**

Maintain verifiable records to support Executive Order compliance reporting and LEED submissions:

- Designate a C&D Waste Data Coordinator
- Identify collection and salvaging methods
- Record:
  - Materials recovered, by waste stream
  - Material disposition (receivers of materials)
  - Quantities of each waste stream diverted/recycled
  - Quantities of non-diverted/non-recycled materials
- Keep data reporting current (e.g., monthly)
- Maintain verification of performance (e.g., bills of lading, tipping receipts)
- Consider C&D waste tracking software



#### Salvage/Deconstruction Considerations

- Deconstruct to salvage items of value such as:
  - Historic components
  - Architectural details
  - Old growth hardwood windows and doors
  - Working HVAC equipment
- Net out value of salvage from demolition/deconstruction contract



### Salvage/Deconstruction Considerations

- Deconstruct to salvage items of value such as:
  - Historic components
  - Architectural details
  - Old growth hardwood windows and doors
  - Working HVAC equipment
- Follow the legal requirements for the disposition of federal assets
  - Under the Federal Property & Administrative Services Act, property can be:
    - Transferred from one agency to another
    - Excessed via discount conveyance to state and local governments for public benefits
    - Sold via negotiated sale to state and local governments
    - Sold to the public via competitive sales
    - Donated to a charitable organization (e.g., Habitat Restore)



## **Universal and Hazardous C&D Wastes**

- Demolition might require special handling of universal and hazardous wastes (RCRA 40 CFR 260-280 and TSCA 40 CFR 761)
  - Asbestos
  - Lead-based paint
  - Mercury-containing ballasts, thermometers, and switches
  - PCB-containing components (e.g., switches, capacitors, transformers, fluorescent lamp ballasts)
  - Used solvents
  - Fluorescent lamps (whole or broken)
  - Underground storage tanks



#### **C&D** Waste Diversion Tools

- Construction Waste Management Plan GSA Boston, McCormack Post Office and Courthouse
- EPA A&E Guidelines EPA policy and standards for architects/engineers for the design and construction of EPA facilities
- **GSA Solicitation for Offers** C&D excerpts
- EPA Best Practice Lease Provisions C&D excerpts to be used in GSA space acquisitions for EPA
- EPA Renovations and Alterations Guidelines Sustainable renovations and alterations standards for use after initial construction/build-out in the ongoing operations and maintenance contracts of facilities



#### **Other Resources**

EPA Construction and Demolition Materials Website (<u>http://www.epa.gov/wastes/conserve/rrr/imr/cdm/index.htm</u>)

**GSA Property Disposal Resource Center** (<u>https://extportal.pbs.gsa.gov/ResourceCenter/content/home.do</u>) Contact: Laura McGinnis, <u>laura.mcginnis@gsa.gov</u>, 816-823-5355

**C&D Waste Tracking Software -** WasteCap Resource Solutions – WasteCapTRACE (<u>http://www.wastecaptrace.org</u>)

