

This is a guidance document with sample specification language intended to be inserted into project specifications on this subject as appropriate to the agency's environmental goals. Certain provisions, where indicated, are required for U.S. federal agency projects. Sample specification language is numbered to clearly distinguish it from advisory or discussion material. Each sample is preceded by identification of the typical location in a specification section where it would appear using the SectionFormat™ of the Construction Specifications Institute; the six digit section number cited is per CSI Masterformat™ 2004 and the five digit section number cited parenthetically is per CSI Masterformat™ 1995.

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SECTION 02 41 13 (SECTION 02220) – SELECTIVE SITE DEMOLITION

SPECIFIER NOTE:

resource management: Thoughtful and considered disassembly as opposed to standard demolition will produce more usable 'reusables' and will help prevent damage to items scheduled to remain. Deconstruction also supports salvage. Traditionally, salvage is implemented for reuse of items by the Owner. However, increasingly extended producer responsibility is providing additional options for product stewardship – salvage for reuse and/or recycling by the manufacturer.

The EPA Office of Waste provides guidance for extended producer responsibility. [For manufacturers, the essence of extended producer responsibility is taking on responsibility and addressing the environmental impacts of their products where they have not done so before. This can include rethinking the very concept of the product \(e.g., selling a service rather than a product\); exploring new methods of product delivery; creating a feed-back loop with customers to drive environmentally sound redesign of products; and creating a closed-loop life cycle, conserving resources by handling end-of-life products as assets. Refer to the EPA for additional guidance; <http://www.epa.gov/epawaste/partnerships/stewardship/index.htm>](http://www.epa.gov/epawaste/partnerships/stewardship/index.htm)

toxicity/IEQ: Coordinate with applicable regulations regarding detection and abatement of hazardous materials.

performance: Deconstruction is typically more labor intensive than demolition.

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes:
 - 1. Demolition.
 - 2. Deconstruction.
 - 3. Salvage.
- B. Related Sections:
 - 1. 01 74 19 (01351) – Construction Waste Management.

1.2 DEFINITIONS

- A. Chain of Custody: a system that tracks a product, its materials and components through two or more life cycle stages.
- B. Closed-loop Life Cycle: a product and/or constituent material(s) life-cycle where the product or constituent material(s) are reused, repurposed (reused for a different purpose), recycled, composted, or otherwise treated as a useful resource that minimizes waste and negative environmental impacts.

- C. Custodian: a single person with primary responsibility for the care and custody of the product until primary possession of the product is transferred.
- D. Deconstruction: Disassembly of buildings for the purpose of recovering materials.
- E. Extended Producer Responsibility: a strategy designed to promote the integration of environmental costs associated with products throughout their life cycles into the market price of the products. Extended producer responsibility imposes accountability over the entire life cycle of products and packaging introduced on the market.

1.3 SUBMITTALS

- A. Schedule of items and materials to be salvaged. Identify procedures for disassembly.
 - 1. Coordinate with Solid Waste Management Plan. Identify materials to be recycled. Identify materials to be salvaged for reuse on site and off site.

SPECIFIER NOTE:

End-of-use is a pivotal point in the life-cycle of a product from a production-consumption management perspective. Reclamation services (e.g. manufacturer take-back and/or buy-back services) offered separately or in combination as a product-service system are, therefore, critical to a sustainable production-consumption economy.

EPA's Product Stewardship program has primarily focused on end-of-life considerations as one means of encouraging more environmentally conscious design and greater resource conservation.

<http://www.epa.gov/epawaste/partnerships/stewardship/index.htm>

- B. Documentation of manufacturers' take-back and buy-back programs in support of a closed-loop life cycle:
 - 1. Take-Back Agreements: Submit copy of each manufacturer's written commitment to reclaim product at product's end-of-life or when purchaser requests to return the product, whichever is earlier.
 - a. Commitment shall specify that producer's reclamation shall be conducted in an environmentally responsible manner.
 - b. Indicate whether manufacturer reclaims only their products or similar competitor products.
 - c. Identify any parameters, limitations, and conditions that may apply.
 - 2. Buy-Back Agreement: Submit copy of each manufacturer's written commitment to repurchase product at product's end-of-life or when purchaser requests to return the product, whichever is earlier.
 - a. Commitment shall specify that producer's reclamation shall be conducted in an environmentally responsible manner.
 - b. Commitment shall specify a financial value for repurchase of product. Value may be extended in one or more of the following: monetary exchange, credit towards future purchase, or other tangible consideration.
 - c. Indicate whether manufacturer repurchases only their products or similar competitor products.
 - d. Identify any parameters, limitations, and conditions that may apply.
 - 3. Chain-of-Custody: Submit chain-of-custody documentation to verify that products have been salvaged from project and satisfactorily transferred and accepted for reclamation by manufacturer. Indicate:
 - a. Description of product: Manufacturer name, product name and description.

- b. Quantity of product.
- c. Custodian Information - Sender:
 - 1) Contact information for sending custodian including name, title, organization, address, phone, and email.
 - 2) Date and time product was sent.
 - 3) Condition of product.
- d. Custodian Information - Receiver:
 - 1) Contact information for sending custodian including name, title, organization, address, phone, and email.
 - 2) Date and time product was sent.
 - 3) Condition of product.

1.4 QUALITY ASSURANCE

- A. Handle waste materials as specified in Section 01 74 19 (01351) – Construction Waste Management.

PART 2 – PRODUCTS

PART 3 - EXECUTION

3.1 DECONSTRUCTION

- A. Inspect and evaluate for reuse existing structures on site.
- B. Disassemble existing construction scheduled to be removed for recycling or reuse, including reclamation by manufacturers' take-back and buy-back programs.
- C. Demolition will not be permitted **[unless approved in writing by Owner]**.
- D. Salvage materials for recycling and reuse as indicated on drawings.
 - 1. Materials scheduled for reuse on site include: **[xxxx]**.
 - 2. Materials scheduled for reuse off site: As specified in Section 01 74 19 (01351) – Construction Waste Management.
 - 3. Materials scheduled for recycling off site: As specified in Section 01 74 19 (01351) – Construction Waste Management.
 - 4. Materials scheduled for manufacturers' take-back and buy-back programs: **[xxxx]**.

SPECIFIER NOTE:

Plug-In To eCycling is a partnership program between EPA and leading [consumer electronics manufacturers, retailers, and mobile service providers](#) that fosters and promotes opportunities for individuals to donate or recycle their electronics.

<http://www.epa.gov/epawaste/partnerships/plugin/index.htm>

- a. Plug-In to eCycling: **Identify [cell phones] [computers] [televisions] for take-back.**

SPECIFIER NOTE:

In January 2002, carpet and fiber manufacturers signed the National Carpet Recycling Agreement, along with the Carpet and Rug Institute, state governments, non-governmental organizations, and the U.S. EPA. This agreement established a 10-year schedule to increase the amount of recycling and reuse of post-consumer carpet and reduce the amount of waste carpet going to landfills.

- b. carpet.
- c. acoustic ceiling tile.

- d. systems furniture.

3.2 SITE ENVIRONMENTAL PROCEDURES

A. Indoor Air Quality:

- 1. Temporary ventilation: Provide temporary ventilation as specified in Section 01 57 19.11 (01352) – Indoor Air Quality (IAQ) Management, and as follows:
 - a. Vacuum old carpets prior to removal using a certified Carpet and Rug Institute (CRI) Green Label vacuum cleaner. Vacuum floor immediately after old carpet is removed.

END OF SECTION