

August 2013, Rev 00

01 7419 – Construction Waste Management

PART 1. GENERAL

1.01 Requirements Include:

A. Each Contractor provide:

1. Participation in Construction Waste Management plan, including separation of recyclable materials.

B. General Contractor provide:

1. Coordinate Construction Waste Management Plan.
2. Provide and pay all costs for labeled containers for receipt of recyclable materials and for disposal of recyclable material.
3. Monthly log of construction and demolition materials diverted from landfill and either reused on-site or sent to an approved recycling facility. An approved recycling facility is a facility that can legally accept construction and demolition waste for the purpose of processing the materials into an altered form for the manufacture of a new product

1.02 Regulatory Requirements

A. IEMA ten day notification for demolition provisions as necessary

B. Project sizes greater than one acre, the contractor is required to submit a “Notice of Intent for General Permit to Discharge Storm Water Associated with Construction Activities (NOI) as necessary.

C. IEPA Uncontaminated Soil Certification LPC 663

1.03 Related Work

- A. Related work may be specified in other Design and Construction Standards

1.04 Definitions

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
 - D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
 - E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
 - F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.
- 1.05 Performance Requirements
- A. LEED Requirements: Comply with LEED Credit requirements as appropriate for the following items:
 - B. LEED Credit MR 2, divert a minimum of 75% by weight of construction and demolition debris from disposal in landfills and incinerators.
 - 1. Redirect recyclable materials back to the manufacturing process.
 - 2. Redirect reusable materials to appropriate sites.
- 1.06 Submittals
- A. **Submit as project requires:**
 - 1. Waste Management Plan:
 - 2. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include separate reports for demolition and construction waste. Include the following information:
 - a). Material category
 - b). Generation point of waste.
 - c). Total quantity of waste in tons.
 - d). Quantity of waste salvaged, both estimated and actual in tons.
 - e). Quantity of waste recycled, both estimated and actual in tons.
 - f). Total quantity of waste recovered (salvaged plus recycled) in tons.
 - g). Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
 - 3. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
 - 4. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

5. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
6. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
7. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
8. LEED Submittal: LEED letter template for Credit MR 2, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met.
9. Qualification Data: For Waste Management Coordinator

1.07 Quality Assurance: **as project requires**

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Waste Management Conference: Conduct conference at Project site to comply with requirements in Section 01 3100 "Project Coordination." Review methods and procedures related to waste management including, but not limited to, the following:
 1. Review and discuss waste management plan including responsibilities of Waste Management Coordinator **as project requires**.
 2. Review requirements for documenting quantities of each type of waste and its disposition.
 3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 5. Review waste management requirements for each trade.

1.08 Waste Management Plan: **as project requires**

- A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition, site-clearing, and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.

- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
1. Total quantity of waste.
 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
 3. Total cost of disposal (with no waste management).
 4. Revenue from salvaged materials.
 5. Revenue from recycled materials.
 6. Savings in hauling and tipping fees by donating materials.
 7. Savings in hauling and tipping fees that are avoided.
 8. Handling and transportation costs. Include cost of collection containers for each type of waste.
 9. Net additional cost or net savings from waste management plan.

PART 2. PRODUCTS (Not Used)

PART 3. EXECUTION

3.01 Plan Implementation: as project requires

- A. General: Implement waste management plan as approved by Architect. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
 - 1. Comply with Section 01 5000 - Temporary Facilities and Controls for operation, termination, and removal requirements.
- B. Waste Management Coordinator may be engaged (and is encouraged to be engaged) to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
 - 2. Control dust, dirt, noise, and environment as required
- E. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.02 Disposal of Waste

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials on Owner controlled property.

End of Division 01 7419

This section of the NIU Design and Construction Standards establishes minimum requirements only. It should not be used as a complete specification.