

10 STEPS TO SETTING UP A CONSTRUCTION AND DEMOLITION RECYCLING PROGRAM¹

1. ADOPT GREEN PURCHASING POLICIES

Commit to reuse and recycle. Someone with overall project authority (owner, construction manager, general contractor) must commit to recycling. He/she can issue a statement explaining that construction waste recycling is important to the project and why. (This statement can be used in many ways - in worker training materials, in news releases and other communications).

- Put recycling into specifications and into all contracts - sample specification language used by Lincoln Public Schools is available in a guide developed by Nebraska Recycling Council
- Establish who will control the debris. Establish one project authority, usually the construction manager or general contractor, to control all project waste, provide dumpsters and waste services for the project, and enforce recycling rules with all contractors.
- Include waste reduction, reuse and recycling from the start
 - Order materials just in time, send back extra inventory, utilize reused building materials, consider ways you can reduce and reuse waste during construction and put these methods into contracts
 - Ask suppliers to reduce packaging, send you recyclable packaging or take packaging back
 - Discuss and encourage reduction, reuse and recycling at pre-construction meetings
- Select a coordinator - designate a staff member (typically construction project manager with the cooperation of the site superintendent) to promote and monitor the recycling program. The coordinator will educate staff and subcontractors.

2. IDENTIFY TARGET MATERIALS

Identify target materials at the job site that can be recovered from the waste stream -- during construction/demolition and during site preparation. What materials are you using whose waste could be recycled? What packaging do you expect on the site? Identify materials that may be able to be recycled, including:

- a. Asphalt
- b. Bricks
- c. Cans & bottles
- d. Cardboard
- e. Carpet and pad
- f. Concrete
- g. Gypsum Drywall

¹Adapted from WasteCap Resource Solutions, Inc. 2011. "Steps to Setting up a Construction or Demolition Debris Reuse and Recycling Program." Construction and Demolition Waste Management Toolkit, pg. 19-21

- h. Metal
- i. Office paper
- j. Paper
- k. Reusables including wood, bricks, counters, doors, hardware, sinks, toilets, fixtures, etc.
- l. Shingles
- m. Wood

3. SELECT MARKETS AND COLLECTORS

Write request for proposal for waste hauling and recycling and select collector(s). Decide what will happen to targeted materials - who will haul what material to what market?

- A. Develop vendor list for your area. Consider allowing more than one collector to service your site. (For example, many projects send out a separate request for proposal and have a separate collector for scrap metal.)
- B. Write request for proposal. Ask:
 - a. What materials they accept and how they must be prepared
 - b. What happens to the materials after they are collected (ask for specifics on location of markets and what your recyclables will get made into)
 - c. For documentation of recycling and trash quantities and weights provided monthly to be part of the service
 - d. For education of crews and dumpster signs to be part of the service
- C. Allow collectors to bid on (and not bid on) specific materials. For example, not all collectors have access to markets for wood recycling. You can include it as an option in your request for proposals.
- D. Select collectors and make arrangements for dumpster sizes and collection.

4. WRITE WASTE MANAGEMENT PLAN

Include:

- A. Description of the project and identification of the construction waste management plan manager
- B. Goal for the percentage of waste to reuse and recycle
- C. Analysis of the projected types of jobsite waste to be generated, including types and quantities
- D. Targeted materials for reuse and recycling
- E. Responsible parties for various recycling operations (calling in dumpsters, monitoring, educating, documenting)
- F. Trash and recycling service provider(s)
- G. End markets for all targeted materials for recycling
- H. Educational and Motivation plan
- I. Waste auditing procedures

- J. Documentation procedures

5. MAKE DECISIONS ON SITE LOGISTICS

- A. Determine where to place dumpsters on site, how many what type are needed, and when. Make sure to put a trash container near recycling containers or the recycling container may become a trash container. If it is a very crowded site, you may only be able to fit dumpsters for those materials being generated in the largest quantity. Throughout the project, consider what scrap materials will be generated and order dumpsters accordingly.
- B. Determine how to move recyclables and trash around the site. How will the trash and recyclables get into the correct containers? Who is responsible?

6. MONITOR

Periodically check the containers to ensure that the proper materials are going into them. If problems exist, find the person or people responsible and instruct them on how to properly participate

7. EDUCATE AND TRAIN

- A. Make sure that every new person that comes onto the site is educated about the recycling program. Include waste into your training program. Educate them before or right when they come onto the site. Provide a one page handout to crews as a reminder of separation requirements.
- B. Set aside time to explain the program to all of the subcontractors at the site, and instill in them that is their responsibility to ensure that their laborers participate.
- C. Bring up waste management at every job site meeting. Reminders are important. Provide feedback to workers.
- D. Post clear signs. It is essential to the success of the recycling program that each dumpster is clearly marked. Your collector may help provide signs.
- E. You can create a sign for the fence which promotes success in the program to the public and reminds crews every time they come onto the site that yours is a recycling site. Tracking month-by-month progress can help to motivate crews to reach your recycling goals.

8. DOCUMENT

- A. Track all materials taken off site for reuse, recycling or solid waste.
- B. Ask collectors to provide you with records, at least monthly, of how much material is being removed, by weight and volume, at what cost. You may need to use conversion numbers (included in this toolkit).
- C. Provide these numbers to the owner, architect, contractors and others on an ongoing basis throughout the project.

9. MAKE ADJUSTMENTS

Obtain contamination reports from collectors and communicate regularly with the collectors to find out how your crews are doing. Provide this information to your crews. Do a final analysis which tells you whether you saved money or spent extra in disposal costs by recycling and tells you exactly how many tons and cubic yards of resources you saved.

Evaluate the program and make it even better next time!

10. CELEBRATE SUCCESS

Promote success in the program to managers, subcontractors, clients and the public. For example, a contractor could take his employees on a company-sponsored fishing trip with the funds from recycling steel.