

Construction and Demolition Materials Recycling

Issue:

Seventy-five to eighty percent of the construction and demolition debris generated in the Planning Area is currently recycled. The material being recycled is primarily concrete and asphalt. Additional opportunities for resource recovery exist for C&D materials currently sent to disposal.

Major Options:

- 1) Maintain Status Quo
- 2) Require C&D Recycling/Diversion for Construction and Demolition Projects.
- 3) Select Material Bans at City's C&D Disposal Sites

Implementation issues/considerations:

- 1) Maintain Status Quo
 - a. Support private recycling and material reuse efforts
- 2) Require C&D Recycling/Diversion for Construction and Demolition Projects.
 - a. Program type/structure and strategies
 - i. Publically funded projects
 - ii. Projects over a certain dollar value or C&D disposal threshold
 - iii. Defined material types
 - iv. Types of construction & demolition projects (residential vs. commercial)
 - v. Material reuse/exchange programs
 - vi. Voluntary or mandatory participation (how aggressive should the diversion effort be?)
 - vii. City's role in managing program(s)
- 3) Select Material Bans at City's C&D Disposal Sites
 - a. Waste reduction or exportation

Other Considerations:

Construction and Demolition Materials Recycling (Excerpts from Technical Paper)

- In the LMC these building rubbish and demolition debris materials are a subset of “refuse” and are thus subject to refuse hauler licensing and related regulations, but are exempt from the Occupation Tax provided they are “lawfully being deposited in the 48th Street public sanitary landfill”.
- The City does not provide recycling or diversion facilities for C&D waste; all such facilities are provided by private and not-for-profit organizations.
- The current C&D recycling programs are voluntary private initiatives with minimal support or involvement by Lincoln and Lancaster County. In FY 2010/2011 an estimated 75 percent of C&D materials were diverted, based upon the quantities of concrete and asphalt diversion (voluntarily) reported to the City.
- C&D processing facilities in Nebraska are required to have a permit from the NDEQ, but are only required to report quantities of processed material sent to disposal (not total quantities processed or quantities diverted).
- When materials are hauled to C&D recycling and processing facilities these materials are considered source separated and trucking operations are exempt from both licensing requirements and the Occupation Tax; they are further exempt from reporting any information regarding the type of services provided and type and quantity of material diverted/recycled. As a result, the number of firms participating or providing C&D recycling services is not known.
- Based on processing rate information obtained by the City (shown in Table 2), it is apparent that significant quantities of potential C&D waste (e.g., concrete and asphalt) are being diverted from disposal and reused/recycled rather than landfilled.
- The concept of mandatory recycling plans can be used with demolition, as well as new construction or remodeling projects. Under this concept the permitting process is typically used to both obligate diversion efforts and as a means of enforcement.
- Minimum diversion requirements for demolition (or new construction) projects would typically be a part of a mandatory (permit required) construction waste management/recycling plan concept.
- From the standpoint of C&D recycling these options may include:
 - Modify government procurement/purchasing specifications
 - Require the use of recyclable materials
 - Targeted programs
- Initially this concept could be implemented with projects involving public funds.
- By incorporating “buy-recycled” provisions or mandatory use of recycled products in procurement and purchasing policies, it is possible to stimulate markets and create incentives to recycle. These programs are often most easily implemented in government programs.
- building specification system can also be used in new construction to dictate or provide priority to the use of recycled materials, thus helping to support markets and create market demand for certain materials.

Solid Waste Plan 2040

- the City and County's standard specification could be modified to include provisions to use materials such as locally produced compost in construction projects. This would create added markets for the City's LinGro compost.
- Before new programs are implemented it may be necessary to undertake a market analysis to confirm that adequate markets are available for materials targeted for recovery, especially unique materials.
- Availability of cost effective markets and reuse options will be a key to expanding the types of C&D materials diverted.
- if transfer station(s) are considered a cost effective option for solid waste management then supplemental evaluations may be appropriate to determine the cost effectiveness of adding select materials processing capabilities, not limited to C&D wastes/recyclables.
- Natural disasters can produce a large quantity of material that is similar in characteristics to C&D waste.