

RECYCLING

IN THE INDUSTRIAL AND MANUFACTURING SECTOR

FACT SHEET

▶ CORRUGATED CARDBOARD DISPOSAL BAN

Corrugated cardboard is not garbage. Starting **April 1, 2018**, the landfill will **not accept** clean and dry corrugated cardboard.¹ It must be reused or recycled. Corrugated cardboard (pictured below) is defined as three or more layers of paper with the middle layer rippled or corrugated.



▶ CHALLENGES TO RECYCLING IN THE INDUSTRIAL AND MANUFACTURING SECTOR

This fact sheet provides useful information to help industrial and manufacturing companies keep corrugated cardboard out of the landfill and overcome typical recycling challenges, including: infrastructure challenges, managing subscription and recycling container costs, training employees on how and what to recycle, and minimizing contamination (presence of garbage) in recycling containers.

▶ VALUE OF INDUSTRIAL AND MANUFACTURING RECYCLING

- **Cost Savings.** For every ton of garbage diverted from the landfill, \$34.75 in disposal costs is avoided. Collection fees must still be paid when recycling, but the tipping fee is often less than landfilling or non-existent. Sometimes recycling high-value, clean materials, such as cardboard and metal, earn businesses extra revenue.
- **Enhance Your Business' Image.** Implementing a successful recycling program will show suppliers, vendors, and employees that your business has a desire to be environmentally responsible.
- **Efficiency.** If materials are wasted on the job, you pay twice: for purchase and for disposal. Managing a recycling program at the workplace helps you understand what is being discarded and how efficiently your employees are using materials that affect your bottom line.
- **Community Benefits.** Recycling helps delay the need for a landfill expansion, strengthen the local economy and protect the environment. For example, the energy required to recycle materials is far lower than the amount of energy it takes to produce new products with raw materials; for every 1000 tons of material recycled, two local jobs are created.

¹ LMC 8.32.040, Sect. C / Recyclable cardboard* shall not be accepted by the City for disposal in the City's public sanitary landfills effective April 1, 2018. (*Clean and dry corrugated cardboard.)

OVERCOMING RECYCLING CHALLENGES IN THE INDUSTRIAL AND MANUFACTURING SECTOR

- **Develop a Plan for Cardboard.** If your business does not currently recycle corrugated cardboard, begin planning as soon as possible (corrugated cardboard disposal ban effective as of April 1, 2018). Discuss convenient options to contract on-site recycling with your current garbage or recycling collector, or search for better services by contracting a new collector. Every [garbage collector](#) is required to offer recycling services to their commercial customers at least twice per year. You may also choose to self-haul cardboard to a recycling processor (see Links & Resources below). Public recycling sites are provided for **residential** use and should not be used by commercial establishments.
- **Inspect Your Garbage.** Assess your garbage and make a list of recyclable and landfill items that are being generated in your facility. If you already have a recycling program in place, inspect recycling for contamination (the presence of garbage in recycling bins). Inspect all areas of your building, noting where certain types of recyclables are generated. Speak with experts (garbage and recycling collectors, Lincoln Solid Waste staff, and other professionals) on recycling options.
- **Assess Bin and Labeling Needs.** Walk through your facility and assess your needs for recycling and garbage bins and labels. It is sometimes convenient to mark up a copy of your floor plan with the needed locations for bins. The best practice is to have one recycling bin for every garbage bin. It should be just as easy for someone to recycle an item as it is to throw it in the garbage. Color coding of recycling and garbage bins is important. The industry standard is that garbage bins are black and recycling bins are blue. This color coding helps people know which materials go where. Uniform bin size is also important.
- **Place Containers and Labels.** Different departments may consistently produce the same type of recyclable waste material. Designate hoppers or dumpsters in these departments to collect these specific recyclables. Set up smaller garbage and recycling stations for different areas, such as offices and break rooms. All containers should be labeled clearly, with signage that is easy to understand for employees. Images of acceptable materials for each container will help overcome language barriers. Click [here](#) to get additional information on containers and signage.
- **Focus on Identified Products and Garbage Streams.** Implementing a garbage reduction plan for an industrial or manufacturing facility can be extensive. Consider first focusing on recycling one or two products that are most noticeable in your garbage stream, such as cardboard. When your facility can consistently recycle these products, begin focusing on other materials.



Recycling dumpsters with a cutout help reduce contamination (left). Scrap metal (center) and wooden pallets (right), among other things, can be collected and recycled (right).

- **Plan for Scrap Material.** Scrap metal and copper wiring can be taken to scrap yards. You may receive compensation for your material. To maximize efficiency, wait until you have a full dumpster load before scheduling a pickup from your recycling collector or consider having an employee regularly take small amounts of the material to avoid some collection service costs.
- **Consider Compactors or Balers.** Manufacturing and industrial facilities produce such a large volume of cardboard. It may be worth installing a compactor or baler. These machines compress materials, save space and reduce the need for frequent recycling pickups. This can lower collection service costs and reduce the need to acquire additional dumpsters or roll-offs. Check with local recycling processors to learn how they can help provide baling equipment.
- **Continually Communicate with Employees.** Engage all of your staff and train them on how the new recycling program will work. Include recycling rules in new staff orientations and encourage all employees to become familiar with everyday recyclable materials and container locations in their workspace. Regularly update staff on recycling and garbage management in staff meetings.
- **Get Financial Assistance.** Take advantage of the City's [Waste Reduction and Recycling Assistance Program \(WRRAP\)](#), which provides rebates of up to \$750 to start a waste reduction program. Look for local or state grants to help with additional funding if needed, such as those provided by the [Nebraska Recycling Council](#).
- **Celebrate Success.** Create an atmosphere of pride by continually promoting the success of your recycling program. Report the amount of recyclables diverted from the landfill to employees and customers. Apply to the [Recycle Lincoln Leadership Recognition Program](#) and earn public recognition for your efforts.

LINKS & RESOURCES

- **American Plastics Council Stretch Wrap Recycling Guide**
<https://plastics.americanchemistry.com/Stretch-Wrap-Recycling/>
- **Commercial Recycling Self-Assessment and Waste Diversion Rate Calculator**
<http://recycle.lincoln.ne.gov/commercial/self-assessment.htm>
<http://recycle.lincoln.ne.gov/commercial/waste-diversion-calculator.htm>
- **Corrugated Cardboard Disposal Ban FAQ**
<http://recycle.lincoln.ne.gov/corrugated-cardboard.htm>
- **Guide to Selecting / Contracting for Garbage and Recycling Collection**
<http://recycle.lincoln.ne.gov/commercial/fact-sheets/pdf/collection-contracting.pdf>
- **Local Garbage and Recycling Collectors**
<http://recycle.lincoln.ne.gov/collectors.htm>
- **Multilingual Resources**
<http://recycle.lincoln.ne.gov/multilingual-resources.htm>
- **Nebraska Materials Exchange Program**
<http://www.knb.org/exchange.htmls>
- **Nebraska Recycling Council**
<http://www.nrcne.org>

- **Recycle Across America**
<http://www.recycleacrossamerica.org/>
- **Recycle Lincoln Leadership Recognition Program**
<http://recycle.lincoln.ne.gov/wrrap/recognition.htm>
- **Recycling Guidelines by Material**
<http://recycle.lincoln.ne.gov/pdf/guidelines-by-material.pdf>
- **Recycling Processing Centers**
 - Firststar Fiber, 402-894-0003, <https://firststarrecycling.com/>
 - Mid-America Recycling, 402-476-8502, <http://www.midamericarecycling.com>
 - Recycling Enterprises, 402-421-6655, <http://www.recyclelincoln.com/>
- **WasteCare Corporation – Recycling Tips for Manufacturing**
https://www.wastecare.com/Articles/Waste_Reduction_Recycling_Tips_Manufacturing.htm
- **Waste Reduction and Recycling Assistance Program (WRRAP)**
<http://recycle.lincoln.ne.gov/wrrap/>

For more information about recycling and Lincoln's corrugated cardboard diversion efforts, visit recycle.lincoln.ne.gov, email recycle@lincoln.ne.gov or call the Recycling Office at 402-441-8215.